

SEQUENCE LISTING

<110> Recipon, Herve
Sun, Yongming
Liu, Chenghua
Chen, Sei-Yu
Turner, Leah

<120> Compositions and Methods Relating to Lung Specific
Genes and Proteins

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<151> 2001-10-25

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<170> PatentIn Ver. 2.1

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aagatcagta	ctcctggagg	tcttccacag	gattggaata	tgacatttta	tatctaacca	660
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aatgcagagt	acaggtaatt	actggttatg	atatgtatca	ttcagatgtc	cgttctcaga	780
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atgaacacat	tttattttct	ttcttctccc	aggtaaagtt	ttacagagtt	acattccagt	1920
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<210> 15

<211> 667

<212> DNA

<213> Homo sapiens

<400> 15

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ccctgacgtc	tcagggcaaa	tgaaggttca	gtgcctggaa	cagggtagga	gtccagctat	300
ggccgcctct	atgccaggca	ctgggcaagc	gtttgtgatc	ctgcagggaa	gaaggcaaca	360
ggtagcaggt	atttctatta	gagaaaaaaa	aggcgtgcag	ggagaaggtc	tcacggggta	420
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cagaggggtca	aataaatcga	tcaatatgcc	cccgcgcgact	agacgcacag	cagcgctctc	540

ctggtttcac aggccactc accctaaggg aaaaatggct gggccgccac atggggaaca 600
 ggatgcaaaa ttcagaactc aaattcagag catctttttt tttctttttg agacgagtct 660
 ctctctg 667

<210> 16
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 16
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 gcaaggatca aatcagagaa accaggggaa agtaaaactac tagaaatctt ggtaattttg 180
 accagaaggg tagaagtga agtgatgaaa tgtggaaagt tctggaagcc ttttgaaagt 240
 aaagctgaaa gtatttgctg ttacatttaa cttgagtga gtgaagacag tgttacagga 300
 tatatccaca ttttctgacc tgaacaacta aaggtctgaa tttcctgagg tgaagaatac 360
 tattaaataa aagtttttagg tcatagggaa tcaagatact tttttggaca ttttaatttt 420
 gagatgttga gtgaaaatca aagtagaata ttgaatatgc agtttgatat acactttcaa 480
 aatttgagaa ataaatttg gagtaaacat ggatctttaa agcatgtgac aaaatgatac 540
 tactcttgaa gtacaaaaat agattctagt tacataagtc tttagaattc aggagctaga 600
 aaaaaaaaaa aaggg 615

<210> 17
 <211> 1108
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (300)
 <223> a, c, g or t

<400> 17
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 atatgaatga gagaaagcat aaagtatgta cacattaaaa aaattatatt tcaaaaagtc 180
 atgaattcta cagagaaaaa cgaaaccaag taagtggtag agggcaggtg gatgagtgtg 240
 gggcgagca gtgggtgttt tctttcctag ccctctgtga taataatata tatataaacn 300
 aagactagaa ggaaggagg aacaagtcac atgggtgtat aaggaaaggc actctagaag 360
 aagataaata aatgtaacat tcaaaagtc tgccatcttt gtgcattaaa ggagaggaaa 420
 agtgctctgt gttgatgtat ttcagaaaaa gaggaggaaa atggtagaaa atgagatcaa 480
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 aaacagaatg gtagcaagga tcaaatcaga gaaaccaggg aacagtaaac tactagaaat 660
 cttggtaatt ttgaccagaa gggtagaagt gaaagtgtg aaatgtggaa agttctggaa 720
 gccttttgaa agtaaagctg aaagtatttg ctgttacatt taacttgagt gaggtgaaga 780

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acatthttaat tttgagatgt tgagtgaata tcaaagtaga atattgaata tgcagtttga 960
tatacacttt caaaatttga gaaataaatt tgggagtaaa catggatctt taaagcatgt 1020
gacaaaatga tactactctt gaagtacaaa aatagattct agttacataa gtcttttagaa 1080
ttcaggagct agaaaaaaaa aaaaagggtg                                     1108
```

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<210> 18
<211> 552
<212> DNA
<213> Homo sapiens
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```
<220>
<221> unsure
<222> (454)..(480)
<223> a, c, g or t
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tcagacagtc cgaccagaca ggaaattgat ttgtcagctt tacacttaaa aacttaatat 180
tggagaaaca gtattggatt gtctatgttc aatttcacag caatttcctg gcattagtgt 240
aaggaacaca aagctatgtg tacttttggc gttgatatta ttttaagctgg tattctaagc 300
ttatgagcat aaattcttta ttgtttttcg caagtatata catatttgta tgcccttgta 360
gatacatatg taggcatata cattacatgt acataaatat gtaggcatat acattacata 420
tgcataatata aatacatgaa tacatatata tacnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 480
ctttttacaa ttgattaatg gccaaagatgc cactgcaatg cagtgaggaa tatgatgggt 540
ctgcatccat tg                                     552
```

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<210> 19
<211> 307
<212> DNA
<213> Homo sapiens
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<400> 19
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acactgtata gcagtatctt ccaaacctaa acattacagg gatccaatga tctagcactt 180
ccaccccaga tgcatacaca agtacatatg ttcactgaaa gtcaagtgca agaacgttca 240
aaagagccaa aactagaagc aacacatatg tttatcaaca gtagagatga taaaatatat 300
ttggata                                     307
```

```
<210> 20
<211> 602
<212> DNA
```

<213> Homo sapiens

<400> 20

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attgctttct aataatttag ctcttgtaa tatcaacaaa gttaaataat cataatgttt 120
tggcctgaac ccaaagtagc tttcaaatgt attaatatac cctaaggaaa tatacaatgt 180
aagtggtaac caacaaatgg gtcttcatat tggtgttgct ttggaatcct tagaggtaaa 240
aagtatttta tccgtctttt aaatgatgaa ctaaatactt ttcaaataatt ggcttcatag 300
agtgtataaa ccatatgaaa atccaaatta acataatatg ttctctccag aaataaactg 360
tacaatgtgg acttaacgtg gcaggggtgg ccacttgcaa acatgacctg agcaatgaga 420
aattgaattc aggaaattta gttttctttt ctttttctct tttctctctg cttttttggg 480
acaactttcc attgagggag ataaaaatatt caggaaaaaaa tactctaagg agtcaaagaa 540
atttggttaa atgagtaaca ttaatctttg tggtgagact gaattttgct gataaaaatc 600
tg 602
```

<210> 21

<211> 934

<212> DNA

<213> Homo sapiens

<400> 21

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tggcctgaac ccaaagtagc tttcaaatgt attaatatac cctaaggaaa tatacaatgt 180
aagtggtaac caacaaatgg gtcttcatat tggtgttgct ttggaatcct tagaggtaaa 240
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agtgtataaa ccatatgaaa atccaaatta acataatatg ttctctccag aaataaactg 360
tacaatgtgg acttaacgtg gcaggggtgg ccacttgcaa acatgacctg agcaatgaga 420
aattgaattc aggaaattta gttttctttt ctttttctct tttctctctg cttttttggg 480
acaactttcc attgagggag ataaaaatatt caggaaaaaaa tactctaagg agtcaaaaaga 540
aatttggtta aatgagtaaa cattaaatct ttgtgttgag actgaatttt gcatgataaa 600
aatctgcttt ttgggttgga ggaacggtgc gttgcactgc tctcatggga caattgtgta 660
atattttggc acgaaaatgg gttatcagac accaaagaat tgtgtacctc agaaaagcca 720
aagtaacaat tggtttgagg tgaaaggaaa atctaagtga tgaaattcag agtctggaag 780
agaatatgtt ggtgtttgat tgggtgtagt gggaagaatt tctttgccta ggagtacttc 840
attatctaaa tggttgttgt atatgtttca tcctaaaata cttttaagtt ggaatgtgca 900
tgcaattcaa gtttatcttc ttgaaatctg gtaa 934
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<210> 22

<211> 568

<212> DNA

<213> Homo sapiens

<400> 22

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cactgcctac atttcagtg gtaattttac aaacctctcc atatggcttg ccctaaaatt 120
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ttaatatatg tcctaaaggg caaatgtagc ataaaccaga ttatggtact ttggcacaag 180
cttttcactc acgagctgaa tgctaactaa gttacaaact taattttgct ttttcatatt 240
ttttgaactt gttttggccc catgaaatgc tttgatatact ggaattttct tccactgttt 300
catttcgctg tgaatcagtc tgaatttaga tccattatgt ggatatatga gaacgtcagc 360
aatggtctct tttagaaagg cctgaattcg tggacaacaa aattaggcta tgccctgatg 420
gtgatttctt tctatagaat ttctttatat tgggcctgag tgagctttag aagtgaagac 480
ctggagagta tttcagattg tctctagctt cagtgtatcc acagcactag tgaattgtta 540
ctctaattcc gaaccagcag gatcagca 568
```

```
<210> 23
<211> 969
<212> DNA
<213> Homo sapiens
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<220>
<221> unsure
<222> (610)..(712)
<223> a, c, g or t
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<400> 23
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ttaatatatg tcctaaaggg caaatgtagc ataaaccaga ttatggtact ttggcacaag 180
cttttcactc acgagctgaa tgctaactaa gttacaaact taattttgct ttttcatatt 240
ttttgaactt gttttggccc catgaaatgc tttgatatact ggaattttct tccactgttt 300
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aatggtctct tttagaaagg cctgaattcg tggacaacaa aattaggcta tgccctgatg 420
gtgatttctt tctatagaat ttctttatat tgggcctgag tgagctttag aagtgaagac 480
ctggagagta tttcagattg tctctagctt cagtgtatcc acagcactag tgaattgtta 540
ctctaattcc gaaccagcag gatcagcatt cctgagaggt tgtcagaaat gcaaattctc 600
tggctattgn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 660
nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnattctaac 720
ccacgattgt gtttactggg ggccctcaaa ccatagctta ggaatctaag aacttcaaga 780
aaattttgag ccttaatctt taaagcagtt attgaatctg tgggtcaaac gagaaaagga 840
gtacttgaaa cctagagttg cgttttcact tgagaagaca cactttggaa acacctatcc 900
aacagactac aaatataggc tattaaatta aaaatctggt ttcaaaataa taccactta 960
ggttggttaa 969
```

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<210> 24
<211> 870
<212> DNA
<213> Homo sapiens
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<400> 24
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```

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atgagctaaa gctaatatgc ttcaaaagct agaactaaat cttagcaata ataatatggt 180
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ttatagactt ttaaaaaata tatattttaa taagtatggt aaatataagg gtatccagta 300
tagtaataga aatatagaaa tagaagggtac aagtccttaa tcagtagggg aaagagaaaa 360
gataggtaat atttttaaat ctttctactcc attcaataga gggcaggaaa gaagataaaa 420
agaagcaaag gaaaaacatg gaaataggaa atacaaaata aaatatgtaa gtagtcataa 480
tataaattaa tctacaaagc cagagagata gtcagattat ccttccatat gctgttttca 540
aagtaacact gaaagataaa aaaatacaag tataagacag gaaaaatttt ctcttggtta 600
ccaccaagtg aaagctggca gcatgaacat catttgaaac atgaacatgt ttttgcttaa 660
aaacagcaaa tgacagaaat atatgtctca cttataaata aggaacaatc catgaagatg 720
atataaaatg actctagata ctgaaaatat actctcaaaa tatataaaac aaaaccgaca 780
gaattatcaa gaaatagcat atccacagtc agtggtgcag attttaacac acctctctta 840
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```

<210> 25

<211> 3795

<212> DNA

<213> Homo sapiens

<400> 25

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atattttcag tatctagagt cattttatat catcttcatg gattgttcct tatttataag 180
tgagacatat atttctgtca tttgctgttt ttaagcaaaa acatgttcat gtttcaaagt 240
atgttcatgc tgccagcttt cacttggtgg taaccaagag aaaatttttc ctgtcttata 300
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accattaaat	attaggtcaa	ccaaaaagac	acagaagtag	gtaatagaaa	ctcactataa	3660
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agaactataa	gcattttcaa	gatgctatca	tgacctaggg	gaacaaatat	gatcaaaatg	3780
tacacgtaag	ataag					3795

<210> 26

<211> 618

<212> DNA

<213> Homo sapiens

<400> 26

aaaatatatta agaggcattt aagagcaaat caatgagatt tggagattaa tttttgtaga 60
 aggtgaggga aaaggaggca tcaaggttga tcccaagtgt gtgggttagg caaaagggatg 120
 aataatagat ggatgctacc tcccttttcc ccacgcagaa ataaagggaa aggagaggggc 180

ctgggtgggt	ggatcagcag	gcagacaggt	gagtgtgagg	ggacaatcag	gagggaggtc	240
caccctgaaa	tcagatatgt	cagtccactt	aggtttccaa	caattgactc	tgaactcctg	300
gaatctgtgt	ccagcatctc	tgatgctgtt	ggttcattct	aaagtggcaa	atattcctgc	360
acatttgtcc	ccgaatcctc	aaattaaatg	tcaccttctc	agacagatct	tcccacacca	420
cctaagctct	tctcctaccc	cacactgatt	ccccaccatt	gcactcttcc	atcttccctc	480
acagcaagta	ccatgtttgc	taattttatat	ttacctgttt	gctttcttgt	ttcttatctg	540
actccccact	agtcattcag	cactgtaagg	tcaggggttg	tatgttggtc	ccactccaga	600
tctacacagt	gacagtca					618

<210> 27

<211> 451

<212> DNA

<213> Homo sapiens

<400> 27

ggtaccatgt	atccccacca	tccaggacca	gccagatgac	atcaggggtgc	ggagaggcag	60
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cccgaactgaa	actcccttaa	gtccatataa	gtcactgtgg	atggagagggt	actgttaccg	180
tagctgtgtg	tgtactgaag	gggcacctct	acaaccgaca	gtggccagaa	gtgagaaaaat	240
aaaatggaga	gtagtctaga	aacatgtgcc	tcattccaacc	cactccgcct	gaaaaaaact	300
tccttccttt	ctcaagagac	acctgggcgc	cttttcattc	tccctaccac	gtggccaaat	360
gctcacaact	aatgcttaag	ttctgaagtt	taccaggtga	gagacggaat	cattgatgac	420
atctatgtgt	tcactcaaaa	caaacgaacg	g			451

<210> 28

<211> 573

<212> DNA

<213> Homo sapiens

<400> 28

ggaactgcct	cttctctgct	ggacagagtc	taccaggctc	cctctgccct	gccctgccat	60
agggtggaca	tgtgaccac	ctagccagta	agattgtcca	ctcctcta	tcattgggcag	120
aaggacaagg	acagtcagag	tctcccggct	gcctcctgcc	acgcattcct	gctccccacc	180
ccaatctat	gcgcttgccc	ttcccgcctt	ttggccctca	ggagctgtct	tgggtcctgc	240
ccttgcccag	gcctgttttt	ccagccttcc	caccaatttt	ctgagctcct	gtgggtgtgc	300
ctatcttgtg	tgggttttgt	tttggttttt	aaatgagcaa	aggcagaatg	agggtgccat	360
gagcacagat	gaggcttttg	ggaaacgccc	cccttccatt	gcactgttgg	aaggagtggt	420
agaggctgct	gtgtttcctg	gggcccggcca	ccttgacacc	gtgcctgcat	gcacgcagcc	480
ccccagcacg	cttcttcacc	agccagcctg	agtgcagggc	cctggccagc	cttgccggga	540
ggaaatgccca	gcccccggtt	ctttaagcct	cag			573

<210> 29

<211> 643

<212> DNA

<213> Homo sapiens

<400> 29

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tagcacagcc ctttaccag ttccctggga agcctgggtg gagaggccgg agcaaaggtc 60
tggggctgaa catgccttaa ctggagcctg gcctgctcca gggccccctg ggggagggtgc 120
agggccggga gggaggagg cctgaagagg cttgcaatth ccctgggtgca cagccccact 180
gcaggccctt caggaaacgt ccctggaggc tgtgagcttg gccacccca gccatctca 240
gccccctcag ctgccggcca gccagctcc actccagtt cgggtgccaag cttttccagc 300
ccgctccagc ccacgcagct ctctctctc tgaactctca cataccata attacaactg 360
accatatttt ccaaagcaga aatcaagaaa ccactaaata aaggatttct gggctacttc 420
tgagtgtcag aggagcctg ggaggtgaag tttggatgca gaggtattca aatctctgag 480
acacgttgat agttttttgc gatgactact atatctatca tattttatta ataagtcaaa 540
gccatcctag gaaatgtgtg ttgggcacat gccacccata ccactgttaa ctgttgacgt 600
ggacacttta gcctggcagt tcctagctgt gtggcctggg caa 643
```

<210> 30

<211> 761

<212> DNA

<213> Homo sapiens

<400> 30

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ccctgccaca ctcagaggac ccaaaagagg cctcagtggg gatctgggta gaataaaaaga 60
ggcagtagca caccaagtca ccaacatggc ccagacatt ccacaccctt accctgtaag 120
tcctctttta agacttcctc taactcatga ttgctctccc agacagacac acggccacca 180
gctgcactcc tattttccagc cactcagctg gctttgcaag cctgccagga gcacagatat 240
ggtcctccct tattctgtca ctaagctgtc cttgtcacct tgggacacca gctgcctaga 300
aggcagacaa tgaatggagg ccaagcactg tctgtgctgg ggacactgtg ctggggggcag 360
gttccaccct gggacaagca aagacaggca gaataaagc tagagatagg cagagttttc 420
aatggagaca ccaggggaca gactgggtct gtaagggaagc ggagggaagc aaggactgtt 480
gaagcaagga cggttggttc cctctctaac ctgcacagta ttccactcac tccctgtaac 540
tagaagagac agccgcgaaa ccagtatcct aggcaagggg tagctgctgt ccttagccac 600
acccggtaga acagcagcca gaaaaggggc ccagagcctc cagcaggcca aagccatgtt 660
tccatgggat ggcaaggcca gcaatatccc aggtctagcc agaaagtcct gtggcagcac 720
catgtctgga gagagaccga gagaagaatg ttggacagag a 761
```

<210> 31

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 31

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cacatctgag gtttcagaga gagggagaaac ttttcatgtc agagccgagg aggttgact 60
gacttgggaa tggcagttga tgacagggat tctggctttg aaatgcattc tcttagagat 120
gcaatgggtc agtaacaagg gactctagga tgatcaaagg agatttgagt gaagggaaac 180
cattccattc agtggaatcc tccatctgac ctccattaca cagatggacg aaagtgagtc 240
tcacagagaa cctagcactt gcccacaggt atagactgaa tcagaagcaa tgctgagact 300
aaaaccaagt ctccaactc ctaaccatgg gatggatggg agaggcacc cgagtctgat 360
```

```

gtttctgctg ggggtgatcct ccacccact gatttagagg ctgtgggagg gtctggggca 420
gggtgctggg gaagcctgcc aggtcagct tgcagccctc cagccagagc tcttcctgtg 480
gccccactca cagaagggga ttacctgcta gttagcatag cctccacact tctgggggtg 540
ttatggaaac caaacctgga ggggaaggga ggaagggcag agaggagggg ggcaattcct 600
gcagtcacta acggcggtggg cttcaccatc tcaagataag ggaggggcag gaagaaggct 660
tccctgcagt ggggctggtg atgggatagg attctcaacc accacccttt gctctttctg 720
cccctgtctg ctgtccagct gtctgcctct ggccagcagc ttagccatca ctgaaggagc 780
agactggctt ggaggagggg tttgccagcc tgagaggggc aaagctctga cccctcacgt 840
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cagacaatga atggaggcca agcactgtct gtgctgggga cactgtgctg ggggcaggtt 1260
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cggtagaaca gcagccagaa aaggggcccc gagcctccag caggccaaag ccatgtttcc 1560
atgggatggc aaggtcagca atatcccagg ctccagccaga aagtcctgtg gcagcaccat 1620
gtctggagag agaccgagag aagaatgttg gacagaga 1658

```

```

<210> 32
<211> 627
<212> DNA
<213> Homo sapiens

```

```

<400> 32
gtgaaggggtc acatcattat ttccctcaag gtcttttgtg caaagtaatt ggcacagggc 60
agctaactat gtggcaggag acaaggctat acttcgctgt ctaaatagaga acaattccca 120
tctgactgat attaatattgt attttagtca aggcctctgc tgagaaacaa gaactaagg 180
agcagcaaaa atctcttctt actttacttg ggtacctgtg aagtcactt gggatagtga 240
aggagaaatc cgcattcctc tccctgggtg gtgtgagacc cagtgaccac cacaccatct 300
tgatgacaaa tcacgcatca tcagaggcct acctccttct ccgtaatgtc ttggagctaa 360
ctggtctcat cgtgtcccag atcttcagtt caaactcttc cccaagtctg gactgctttc 420
tatctctcta attcacacac ccagatattt ttcttttgac agccaacaca aacccattg 480
cttgagaaat ctgctccaat taccctgaga ttcaaattct gattcagctg tgatgctgga 540
cagctaacc ccaatttgctg agccccaata tctaatttta gaaaatgaaa tactaatatt 600
taagatatgt ggcttttgag gattatg 627

```

```

<210> 33
<211> 1212
<212> DNA
<213> Homo sapiens

```

<400> 33

```

tttatgcttc caccaaaggt tttgggtaga aagaagatat ttttgatata taatatcata 60
gtactataat tttaaaaacta gcttttcaga caaatgtgtc cactcaggca caggtaccgt 120
ggacccccaa agcaggagat gcttcacact acctcaatga agccaccgtc accactactc 180
actcactgaa cagatatatta ctgggcatac actacatact aggtgacttt ctaaccacgt 240
gctactccaa gtgtgggtcca tgggaacagaa ccagaccatg gactgtttgt tactgggtctg 300
ctacaagata agtacaaaaa tgaagagtaa gcatctagaa acatagcata aatgacactg 360
ccatttaatc agtgggtctca tttcgctgga cagagtatag acaagctcag gagttgtcac 420
actactgtgg tgagttactg tggtgttgtt ccaggcacat gccatgctgt cttagcctttg 480
taagacatgg aagcaaggga gtgataaaat cacatgtacg ttttaggcag atgccttctg 540
cctaaagatg aggaaaggac aagaaggagg gtgctgaact acattgtgaa gggtcacatc 600
attatttccc tcaagggtctt ttgtgcaaag taattggcac agggcagcta actatgtggc 660
aggagacaag gctatacttc gctgtctaaa tgagaacaat tcccatctga ctgatattaa 720
tttgtatttt agtcaaggcc tctgctgaga aacaagaact aaggtagcag caaaaatctc 780
ttcttacttt acttgggtac ctgtgaagtc cacttgggat agtgaaggag aaatccgcat 840
tcctctccct ggtgagtgtg agaccacgtg accaccacac catcttgatg acaaatcacg 900
catcatcaga ggcctacctc cttctccgta atgtcttga gctaactggg ctcatcgtgt 960
cccagatctt cagttcaaac tcttcccaa gtctggactg ctttctatct ctctaattca 1020
cacaccaga tatttttctt ttgacagcca acacaaaccc cattgcttga gaaatctgct 1080
ccaattacc tgagattcaa atcttgattc agctgtgatg ctggacagct aaccctaaatt 1140
tgctgagccc caatatccta atttagaaaa tgaaatacta atatttaaga tatgtggctt 1200
ttgaggatta tg 1212

```

<210> 34

<211> 447

<212> DNA

<213> Homo sapiens

<400> 34

```

ggctgtcccc cccaaaaaag tttatatatg taatgtataa acataaaata gtgattaccg 60
aattgctctc tagaaaagtc ttaagtgtca aaatcttaaa tgccattctc cttgtcccca 120
cagttctaca ttttgaaatc tattctaagg aaagaagata agtgtgtaga tatccagacg 180
tgtgtggagg tcggggctgc attatttata aaaggagtac ttgttaaacc tgctggcatt 240
tctgcactgt ggcacacctc atgtgtagac aggcagaagt gtgcagtgtg agagggaag 300
gcggggctctg gagcagtccc cggggcactc ctgggtttta gtacatgggt ctctaaggta 360
accatcagag gtgaggagac ggggtacact tttcttttat acatgggtgg attgtagaga 420
ttcttttggg aagcgtgtat tactttt 447

```

<210> 35

<211> 1078

<212> DNA

<213> Homo sapiens

<400> 35

```

ggctgtcccc cccaaaaaag tttatatatg taatgtataa acataaaata gtgattaccg 60
aattgctctc tagaaaagtc ttaagtgtca aaatcttaaa tgccattctc cttgtcccca 120

```

```

cagttctaca ttttgaaatc tattctaagg aaagaagata agtgtgtaga tatccagacg 180
tgtgtggagg tcggggctgc attatttata aaaggagtag ttgttaaacc tgctggcatt 240
tctgcactgt ggcacacctc atgtgtagac aggacagaagt gtgcagtgtg agaggggaaag 300
gtgggggtctg gagcagtccc cggggccactc ctgggttttaa gtacatgggt ctctaaggta 360
accatcagag gtgaggagac ggggtacact tttcttttat acatgggtggg attgtagaga 420
ttcttttggg aagcgtgtat tactttttta cagtagtaat ttgaaaacat ttagatatct 480
tcattggaaa gaaaagtact ctttaagtcc ttggcaagtt gataaatatg ctttgcaata 540
gaagaattta ggggcatttg tttttctaac tcacatgtaa gctcttcaag gtgggggactg 600
accctcgggg tctgagcggg gctctgctac agcccatcct acaaacagtc tcccagggtt 660
ccatccagaa gcaggtttgt acctctcatt cccttgcttg aaaccttggc atgactttcc 720
tgtattctta ggatcctaag gtctcagggt ccctggaagg cctgcctgat cctggcctct 780
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tttactttct agctctctct aagtccctt tgacctcggg gcctttgcac aactgttcc 900
ccttccttgg aatggcctcc ctttaccttc ctcttctcca gcccctcagt tcatgctcat 960
cctctcatcc tttgatcccc tgtaaactt agcctaatag cttttttcct cttttctaac 1020
agcatcccat tgtgcaattt caggaaggag ctcatgtga ccttagttgt ttaatgcc 1078

```

<210> 36

<211> 424

<212> DNA

<213> Homo sapiens

<400> 36

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aagatagtca catgggttac taagaatcag gtagacaaga aatgaaacaa gaatcttaaa 60
ttttgttttt gacatcaaaa ctctcttca tctaataatt taccagaaa cccaatatgt 120
aacaaattga gaatgaaatg ctttctctaa agccagttga gagggccaaa tccccaagaa 180
ttcatcctct acccaagtac ccaaagtacc tatgaatata ttcaaaaac cacttcaata 240
aaacaattaa atgaatatac aaactgacat acagaaagggt agtgatgtca tcagatataa 300
actgcttgca gaaaggcagt tccattaaat tcacactaca gttcaaagag ttccttgggtc 360
agcttatgaa cagactcatc tgaaattcaa tgtttgaagg atcgactggg tgcagtgggtc 420
caca 424

```

<210> 37

<211> 860

<212> DNA

<213> Homo sapiens

<400> 37

```

tgtgccttgg gccttggcca ctcatatttg gccctagaat atttatttct tcaaacattc 60
tacagagttt gactctttct tggtgacact agtcagcttg agacgtgcaa ttatttactg 120
gcaatcttaa agctcaaaat accaggatct aagacaaagg tagctaaaac tgaatcacia 180
tcaaactgac ttcataatta atgctttaat caggaaagtc tcagcatatt ccttaagata 240
ctcaagcact cacgtcaaga aaatttctct aaataaacc tgtaaagttt gccattgttc 300
ctagccacat ttttctgggt tttctaatag atcatttgtt ctagaaaaca cttagaatct 360
gaaacccaaa gggttagcat gtagacttca tgaaagccca atcccctaaa acctgaaatg 420
cccaggaatt ttctcaattt gagtaaaaag atttactgtt caagttatgt aaaaccaa 480

```

```

cctgtgaatt tgacttttga aagaattaca gtcacacagc aaaattcact ttaagatgca 540
atgcaaccca caccatgaat ctgttaattc tgtctttgtc aaactacca aaaaatcaat 600
ttgtctttct tgttattgca ggaaatagag gtttatgcct cattaatcag aaggggagca 660
gtttaggagc agttatttac taagcccttt aagttatact agacagacca ttttaaaatc 720
acagtatcat tttagaaaaa tacagtccaa atagcaagtt tagggtagca atcattttaa 780
atgtaataga gatgagtaca catagacaca ctcacaacct taacactgag cttgaggaaa 840
gtataaagct tgctcathtt                                     860

```

<210> 38

<211> 272

<212> DNA

<213> Homo sapiens

<400> 38

```

cattttgact gtctttacag aaaaagttta ttgaccctgt gtgtagataa gaaatcattg 60
tgacctgagt gagaatatta gtcaatgtaa ctcttcaagg taatgaaaag agtactgagc 120
tatgatttta acttaactgc agagaagtct agcatattcc agttatcagc agtgtagcat 180
gataactaaa ttacttgacc tttcagaatc ttagttttct caattgttaa atgaacatac 240
tgatactatt ctactcactt cacagtctta aa                                     272

```

<210> 39

<211> 207

<212> DNA

<213> Homo sapiens

<400> 39

```

ctgagcctgt cgggtgcatca ggagcagtgc actgcacagc gagatccggg ccagctggaa 60
gggagggggg ttgcagaggt gccggagcca gatggaacct tgtggtgcct ggggaggaac 120
ttggattttg gattgagggg cagccggcac gtgcagtggc agcagtttgg gcaaggaggt 180
gatgaactga gttgcttttt gttgaga                                     207

```

<210> 40

<211> 134

<212> DNA

<213> Homo sapiens

<400> 40

```

gtgtgagcta ccaccactgg cagttaagaa ttttaacaat ttgtcaatga aacaagaatc 60
tcaattagag tctttatata caatctgtac tgttggaatt ttcaaataaa tattgtaaag 120
aaaattaaca aaac                                     134

```

<210> 41

<211> 546

<212> DNA

<213> Homo sapiens

<400> 41

```
ccaatgaata caaagcagag atttaagaag ttgaaagaca gatttttacag ggtgaacaaa 60
gttacagttc tgcactagaa ggaatgaaga tggaaatctc ccatctaact caggagttac 120
atcagcgaga tatcactatt gcttccacca aaggttcttc ctcagacatg gaaaagcgac 180
tcagagcaga gatgcaaaaag gcagaagaca aagcagtaga gcataaggag attttggatc 240
agctggagtc actcaaatta gaaaatcgtc atctttctga aatggatgat aaattggaat 300
tgggtttaca tgagagatgg ggttttacca tgtgtccag tctggttttg aacttcggga 360
ttcaagcaat ccgccagcct cagcgtccca aagtgtcggg attacaagtg tgagctacca 420
ccactggcag ttaagaattt taacaatttg tcaatgaaac aagaatctca attagagtct 480
ttatatacaa tctgtactgt tggaattttc aaataaatat tgtaaagaaa attaaaaaaa 540
aaaaaa 546
```

<210> 42

<211> 1134

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (538) .. (585)

<223> a, c, g or t

<400> 42

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agttcatggg cttgaggggtg tggttaattgt atttaggtcc tgtgaaaagg cagaagccct 60
agtaaacaac ctaggctttc attgagaacc ctgagtctag gtgaatcaga aataaaacat 120
aggtagtgaa gccaaaactc aaataatttc agattagtgc ccctagccta gatgtctgcc 180
tgaagccaga ataaaaattc tctttggagg aagatgcttt tcccagaaac tcaggttatc 240
actgtagttt ttcattgtact atatctgtca gtcagtagaa ataatagaca catcacatga 300
gaagaccaga tatgattaaa aaaaacaata aaaaataaac aaattggata tacctacaag 360
agatccagat aatagataat caaatatggg ccctaccata actgtgatta atatgtttca 420
aggattaaaa gataagattg aaaactctgc cagagaactg aaaattgtaa ataagaccaa 480
atggaccctc tggaactgan aaatacaatt actgcagtta aaatctaat gagtgaannn 540
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnatggg tgcataaatg 600
aattaatgac taaaaccatt gaatgtgtac ttacaatggg tgaattttat gctgtgtaaa 660
ttgtacttta aaaattaagc tttaaaaaaa ccaaatgaat tggttcaata gagtagatgc 720
aattgaggag agagttagtg aaccagaaga taaagcagaa gaaaatatca acaataaagc 780
attttgaggc ttttagatgg aaaaataaata tcagattgtg aaagacatat taaatatggg 840
ggaaaggcct aatatatgtg taactggagg ttcagcngga gaggagagag aaagtgggac 900
ataaaaaata attggaaaaa aatagctgag atagtcttaa aactaacaaa tcacacaaag 960
ccacagaatc cagaagccct agggcaccaa gcaggataag taaaaagatt caacatagta 1020
aaatttctga taacaaagct aacgagaaca acatagggac aacatggtaa catttataaa 1080
agaaaaagag aaaagctgaa aagcatcatg gttggggagt ggggtacctc tatc 1134
```

<210> 43

<211> 161
 <212> DNA
 <213> Homo sapiens

<400> 43
 atgtgcttat ttctagtata tgtgctgctg aagcgagcag taaaatgtgc ttatttctat 60
 taatgaattc tttattataa aagtgggtaca ttattacaaa agtagtaaat gtttattaag 120
 attagaaaca aattctaatt atacagaaga gtacttactg a 161

<210> 44
 <211> 413
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (220) .. (221)
 <223> a, c, g or t

<400> 44
 agctcactgc agcttcaaac tccaaagctg aagcaatctt cccacctcag cctctcaagt 60
 agctgggact acaggcagac gccaccaggc caggccaatt tttgtatttt ttgtagagac 120
 gaggtttcgc catattgccc aggctgggtct cgaactcctg agctcaagtg atccaaccac 180
 ctcatcctcc caaagtgcgtg ggattatagg cgtgacactn ngtgctgggt ctacagtaagt 240
 actcttctgt ataattagaa tttgtttcta atcttaataa acatttacta cttttgtaat 300
 aatgtaccac ttttataata aagaattcat taatagaaat aagcacattt tactgctcgc 360
 ttcagcagca catatactag aaataagcac attttataat atagaagata tat 413

<210> 45
 <211> 470
 <212> DNA
 <213> Homo sapiens

<400> 45
 atcaaagtct gagaccaaga tattgcgaga tggaagtgat ggtaatggaa agaacaatga 60
 tgaccttgga agagatactg tgaggaatta acaagagggtc aaatagaaat aaatcaaagg 120
 gctgacaggt agcactgagg tgagtaagca caaattaaca cagtttcatg gctttctcca 180
 gcaaagctca tcagcaaaaag ccagagactc tgggagtagc cagggtttaga gaacatgcct 240
 atggaatcag tttacaatgt ctttaaatac agttaaccgc tttcctccta aaatatcttt 300
 aaaatattct ttctccatgc tattagtatt cagaattaaa atgttggtac tgatgtcaaa 360
 gcaaagagaa taaactacgg agaaattaac tcttcatttc cagatacaga aggacctgat 420
 tttgtagaga ccaccaactc aatagtttgg agcaggaggt ggcaaaactac 470

<210> 46
 <211> 410

<212> DNA
<213> Homo sapiens

<400> 46
ccctcctgtg tcttttaaaa cagcatcacc ttccccccat gtttcccctt ctccccagat 60
ccattccact tagtctcacc agttcagttt tccttcatct gtctatttta ctggaagaca 120
gaactgtgtg atgattaaga ccctgggtatt ggagccaaac acagctaaat ctgacttacc 180
acagcactta ctaagttact tggctctcact gagcctcagt tctctaataa aatgaggata 240
atatctacct tttgtagtta tggtaaggat ttaaaagctg atgcctgtgc ccgggatatg 300
gtagacacta cttacattgc tgtcatgatt ctattgtatt actcagtact ctatcttctc 360
cttcatacac ttcctttgcc aataatgaca aaaataatca cagcttatgt 410

<210> 47
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (254)..(276)
<223> a, c, g or t

<220>
<221> unsure
<222> (333)
<223> a, c, g or t

<220>
<221> unsure
<222> (393)
<223> a, c, g or t

<400> 47
gtctaacttc agtgcattgc aacacatcag atatgggttaa atgtaggagt ttataatgat 60
acttttaaaga gagaaatcta gtccctaatt gcttgatctt ctctctggta attattaggg 120
agattaagag tcacaagtac aagaagccac agagaaacag gcatagtcta gaagggcagt 180
gtatcccatg cccatagctg tgccctgccc atggcccatt aaacagcggc catgagacct 240
tttctgtgtg tacnnnnnnnn nnnnnnnnnn nnnnnngtct tcaccagcgg ggaagctgca 300
gtcctacttt gtctgttctt actgtgctgg aangtttaac atatgggatt taattgtggg 360
tttatctcca aattttttta ttatacagat gcntcttgac atacaatggc g 411

<210> 48
<211> 1022
<212> DNA
<213> Homo sapiens

<220>
 <221> unsure
 <222> (254) .. (276)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (333)
 <223> a, c, g or t

<400> 48
 gtctaacttc agtgcattgc aacacatcag atatgggttaa atgtaggagt ttataatgat 60
 acttttaaaga gagaaatcta gtccctaatt gcttgatctt ctctctggta attattaggg 120
 agattaagag tcacaagtac aagaagccac agagaaacag gcatagtcta gaagggcagt 180
 gtatcccatg cccatagctg tgccctgccc atggcccatt aaacagcggc catgagacct 240
 tttcctgttg tacnnnnnnnn nnnnnnnnnn nnnnnngtct tcaccagcgg ggaagctgca 300
 gtccctacttt gtctgttctt actgtgctgg aangtttaac atatgggatt taattgtggg 360
 tttatctcca aatttttttaa ttatacagat gcgtcttgac atacaatggc gttatgtccc 420
 aataaaactca ttgtaggttg tagatattgt aagttgaaaa tgcattcaat acacctaccc 480
 tactgaacat catagcttag ctagtctac cttaaagtgt cttagaacat ttacattagc 540
 ctacagtctg gcaaaagcat ataacacaaa gcctatttta taataaagtgt ttgaatagct 600
 catgtaattt attgaatatg gttctaaaag tgaacagcag gatgggtgca tgggtattca 660
 aagtatgggt tctactgaat gcaagtggct ttctcaccaa cataaaatca aaaaaaaaaa 720
 aaaaaaatct cctttagct atcaggagac ttcagtgact taaatgcaag attgaattcc 780
 agtgcctctt gcgctctttc tatccctgtg tccctatgt ataactataa taagtgcac 840
 caggaaaatg ttatgagagt ataaaacagg gattaaaaat aatttggggg taaaaggagt 900
 gggtcataaa tacttcccag ggaagatgac atttatacta ggccatgaat gatgtaagat 960
 tttaacaggc attcatgggg gtggggcagg cattccaggc ttagggaaca ataggagcaa 1020
 aa 1022

<210> 49
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 49
 gcaatcatat tcagcctgaa gtgaaaggat tgacctgtct cggtgcctgt tgcaccctcc 60
 tgagctgatt aggaaaccta actttccacc aaagggtctac cgcagtgtg ggaaacagca 120
 cctcccctac ttctcctgt tgctttgggg aggccatgcc aggtgtgctt gatgccctct 180
 gccatacctg aatataccag tgctggcttc cggaattagg ggcaataggc agagacatga 240
 gcggggtgct tgtgagaagg gagaaagcaa aaaccggag ggagaattgt ggggaagaca 300
 tttaaaaatt gactgatttt tcttatacat tttcaagagt cctgattttc agttttttaa 360
 aacattactt taaaaaaacc aatgcatttc aaagttgatt acaaaatgat tttaaactcc 420
 tggattttac ccaaattttg tttacttaaa ttatagatga tcttaatatg ctattatttt 480
 aaaaaaacat atcctactct attgtaatgt attatcagtt taaaaaatta ggaaactgcc 540
 tatttcactt ttttaattta aagcacatat caaagatcat ggcaaaaaag gaggggctca 600
 ataaatgtta gcccttcagt tgcttcaaaa g 631

<210> 50
 <211> 797
 <212> DNA
 <213> Homo sapiens

<400> 50
 tgtgtagctt ccatgtttcc tgtattaaca atgctaattgg gagaagcgat taatttatgt 60
 aaactttaca tttttatgca aatgaagctg atattttatta gagctaaaac aattatactg 120
 gcacttagtg gagtaacctt gtgtgcctgg gaaatgttag aggagagcag ttgatgttcc 180
 actaatacct ctgctgtaaa caaatatgca tttatgccac tttttagaat ttaaagacaa 240
 aaagaagagc tcggagagca ttgctggaga ttgcttatta ggggttgataa cctgaaataa 300
 ctccctgattg gcaggcgagc cttggcctta caattttttt gtgaaagaaa gatagccttt 360
 cttgatagaa tgtaataaac aaaatgataa aaaatgaaat gctaattgca ttttaaagag 420
 gtcttttgaa aaaaaatttt taatagttgg ttgtattggt actgagagaa ctgttatgct 480
 aatgactgac tacctagatg attttgcatt aatataataa ccattacctg ccttagtgct 540
 ttgtacagta ttgtggcaaa atagctaanc ctaaaggagt tatacaaaaa gcagaattcc 600
 ataatgaaac agaattttac tttccacata aatagcatgc cttttttttt tatttttttta 660
 agaccgaaat attatatcag aagtgtgttt tctttcctgt atgatagtta cttgcatggg 720
 acctgggttg ttcattttgt tttgtttttt taataccagg agaaagaagc ttctaacttt 780
 tctgttgcca tacacgt 797

<210> 51
 <211> 527
 <212> DNA
 <213> Homo sapiens

<400> 51
 ggatggagga agggcagttg cgaaagtggg ggaaaaggag atccagcaga gcatggcaca 60
 ttctcaggca aatcagattt ttttttcctt tttaaagagc ccttacaaaa gattgatggg 120
 ctgaacattt atttccttca cacttttcac ataatcatgt accccttagt tcatggaagg 180
 ccttcaagta tttctagggg ccaagtacac cttgtcagag cgcagaagct acacagtcag 240
 actaatgaat catctcagaa cattttcctt agactttggg tatacctcta cagaaatcac 300
 tggatgttat taagcctttt tagtttttaa atatttcaaa tgattttatt atatgtgtag 360
 aattcgtttc cttaagattt tctttctatat ggtctttaa gactctcata acagccctca 420
 caatgaaaca agtgaggtat tgttatccac atttctaaat gactgagatt atgtgatttg 480
 tctaagggtca cacagtatta gagtcaggac ttgctgccat ttttctt 527

<210> 52
 <211> 579
 <212> DNA
 <213> Homo sapiens

<400> 52
 ggatggagga agggcagttg cgaaagtggg ggaaaaggag atccagcaga gcatggcaca 60

<211> 403
<212> DNA
<213> Homo sapiens

<400> 54
cgaactcctg gttgcccttt tctttcatag ttccccagtg ggagccctct atgtgtggta 60
aagacactgg ggagtagggg acagttagcc cagaaaggct tttctgaggc agagggagggt 120
ggaaccgact agttgggagg ggaatctgta gtcctagaga gtttatgaga actgcccac 180
agtgcaccca aagacatgag cacctcgag ccctggaatc tgggccacat aaatttggtg 240
ggatccaggc ttgcccacaa agagctgggt gatgctcatt cctgctccac ttcctatccc 300
agcgccccag agagctgtct ccccaaacca aaggcaaggg aaggttacaa agttccctat 360
acctggcctt gaatgcaagt tccctctgtg gtccagctcg agc 403

<210> 55
<211> 360
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (58)..(289)
<223> a, c, g or t

<400> 55
ttattaccag agatgacagg tccatttgtg gtagttccct gaagaccttc tagtggggnnn 60
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnna agttttaaaa 300
agaaacagaa aaaatacaga ataaagctta cagaataagg atataaagaa aatatttttt 360

<210> 56
<211> 247
<212> DNA
<213> Homo sapiens

<400> 56
tgtctgattc caaagcccat gctttctcca aacttaccat gttggctgaa gagaaggaga 60
tctgagaagc ccagagagac tctcacttct taactaaggg ggaagaagct tctctgttac 120
tggccccatt tcatctgctg aacccatggg gtccttacat gtagggtgcc cattcatccc 180
catttgcttg gaacagtccc actctatgtc tgtcatagtg tcagtatggc agtattgtta 240
aaattcc 247

<210> 57
<211> 250

<212> DNA

<213> Homo sapiens

<400> 57

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gcctgtctga ttccaaagcc catgctttct ccaaacttac catgttggct gaagagaagg 60
agatctgaga agcccagaga gactctcact tcttaactaa gggggaagaa gcttctctgt 120
tactggcccc atttcatctg ctgaacccat ggtgtcctta catgtagggt gccattcat 180
ccccatttgc ctggaacagt cccactctat gtctgtcata gtgtcagtat ggcagtattg 240
ttaaaattcc                                     250
```

<210> 58

<211> 598

<212> DNA

<213> Homo sapiens

<400> 58

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gggctggaga aatcactagc agggaggagc cctgaggttg ccgaggggga tcggagctac 60
ttcccaaggc gcctacaccg cccgtagact gggaaactac ggtcacaaag ggtcagcgca 120
ttccccaagg tcccagagcc acacgcagca tggctggcat ttgaaagtca aagcagagga 180
agcaggcagg tggtcttgt tgaactggct tccagagtct gtgttgggca gagagatcct 240
tccccgagag tggagtggcc tcgtgtcac ctgggttcag cgtcaagggt cacctggaat 300
cacctgcact cttgtccttg accaaggcag ggtggttagc catgggctga tagccttgga 360
gagcctgatt cagccttttg gtagagctgg gtcagtccag cctcagggcc atcactcacc 420
cgaagcattg tggtaacctg cctgccccctg gagaccccggt gtgtgggggca gggtgaccgt 480
ggtggagagt gggagctggc agaggttaagg aggcacacag tcatgccaca gcaccagagc 540
tcagggcgcc tgagaagcaa ggtcatagcg tctgtttctt ggaccccgct agtctcca 598
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<210> 59

<211> 594

<212> DNA

<213> Homo sapiens

<400> 59

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gccctgtctg aaggggctgt tgggtttgca ctcagcatct gtccctccag aattctggcc 60
ggctcaccca ggccggggct tctgtaggct ccaggttatt gccagaggc ctgagtccat 120
gaatggatcc aggacagtgg ggaggctggg cagctccagt gcctgcttgc ctcattgcac 180
attgttggct tgtttacctg gggggccctt tgccttagca catgtgtgac ctctgtgatc 240
ggttagagtc ctgcgggaaa ccagtcctag tcaggagagag tctggggccc tttccccaca 300
gggctctgtt ctcaaagtcc catagctggg tgaccaatgt agatgcaggc cccatgcctt 360
gccagaggag cctggctcct gggagcccag aaaataccag tgggagatgg gaggtatggc 420
ggggcagcct ggctaggggt gatatggggc agagataggg aagaggctct tcttggaagg 480
catggggcac cttcaggggt ctagggggct aggggacctg aagcctaggc ccaagccaga 540
ccctgaccct gtacctcca tccccacagg acatcaacaa tgctgggggc tgct 594
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<210> 60


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gggccagcag agggcgccac caccacctga cggctgggga cccaccagc ccctctcccc 2640
tctctgctcc agactcactt gccattgcca ggagatggcc ccaaccaagc aaccccgctt 2700
ttgcagcaga ggagctgagt tggcagaccg gggccccctg aacggacca tccaacagcc 2760
ggcctgctta gtcggctcac ggtctcaaga attgctagaa ccaaaaaaaaa agggacaaga 2820
gcaaaaacga agacgaaaca acagggggg 2848

```

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<210> 61
<211> 572
<212> DNA
<213> Homo sapiens

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<400> 61
accctgggta atggtggaga cgagggggttc cagcctcctg gtcctgtcc cattcactgc 60
atcatcgcc gcaatgacag ctctgtcgga ccacggccca tgcaacagca gcagaggggc 120
ccaacagtct aatgaaaagg cccatactt gaagtcagaa aatttgggtcc cagtcctggc 180
tctcttgaga attcactatg tggcctggtg tgggacagaa aaatctacat aaggacagaa 240
ttctattttc tgaagcaaaa aacagtcgag gggctaccat aagatttttt tcagcagttc 300
agttgcaaga gatgttaggc atctcctaca actcacacct gtcaaagaca taccaggaa 360
gatgttcagc gttttcacat ttaggtgctg aacaacccta tatagctgtc tatatcttga 420
cctatttccc tgacttcctt ggtggttgac cttgggtcagt tccggccttg ctgacacctg 480
gtctccatgg ctgggtatat ctctaagtta tcttgtttcc aggtcagccc tgtttcctgt 540
aacaataat tctttccctt cagtgcagc aa 572

```

```

<210> 62
<211> 650
<212> DNA
<213> Homo sapiens

```

```

<400> 62
accctgggta atggtggaga cgagggggttc cagcctcctg gtcctgtcc cattcactgc 60
atcatcgcc gcaatgacag ctctgtcgga ccacggccca tgcaacagca gcagaggggc 120
ccaacagtct aatgaaaagg cccatactt gaagtcagaa aatttgggtcc cagtcctggc 180
tctcttgaga attcactatg tggcctggtg tgggacagaa aaatctacat aaggacagaa 240
ttctattttc tgaagcaaaa aacagtcgag gggctaccat aagatttttt tcagcagttc 300
agttgcaaga gatgttaggc atctcctaca actcacacct gtcaaagaca taccaggaa 360
gatgttcagc gttttcacat ttaggtgctg aacaacccta tatagctgtc tatatcttga 420
cctatttccc tgacttcctt ggtggttgac cttgggtcagt tccggccttg ctgacacctg 480
gtctccatgg ctgggtatat ctctaagtta tcttgtttcc aggtcagccc ctgtttcctg 540
taacaaataa ttctttcccc tcagtgcagc gaagtaatgg nctcatctgg cctgatccag 600
catttgggga gaagccggtg aaagagggca tctaagagat atgtttaatg 650

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```

<210> 63
<211> 591
<212> DNA
<213> Homo sapiens

```

<400> 63

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acaaggtgag ttgggatttt aatcatgggt tcagttttaa ggcaaagggt taatcatggt 60
ttcggtttaa agatcatgcc gttcagttag ccccttggtt tgatctaaag gtgtttgaca 120
gcttgaaatc caaaaaggagg tcaactgagg tatggagagc tccacatatt gggctaaaag 180
ccagtcacat ttagcatttt ggaaagttat gtgaaaaatt gatatcgtct gttgtaaaac 240
tgaagcaatt gccaagcttg tccattgttc ttttgactg aattaactca ctcttaataa 300
aaggaccgac acagggcctt acacgggttg tctttgtgca gggccacct gtgtatcttg 360
ctctgatggg tgtctttgct catagctcaa tgatgctgat taaatgagtt taagtgtgct 420
ggacagtgtt gcacaaacta ggccatttgt gtgtcttttc tctttctctt cctttgtaga 480
ttataaatc agcctgtatt ctaacaaaag attttcattc cagaatttaa ggcagtgttc 540
ttctctcaa atgatattgc ctcacagatg gtctaggggc agccagtgga t 591
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<210> 64

<211> 542

<212> DNA

<213> Homo sapiens

<400> 64

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ctcaactagc attaacattg gaggtcaatt ttggtattga acataaatgt gagattaaag 60
ttgaagggcc cagatatctc tcagagatga ctacaaccac gggagatgtc tctgttttgt 120
tttcccatgc atgtaaattc aagtatctat aaacagcatg ggccaaaagg cagtcatgaa 180
gaggtcacag gacaaagctt ttcactttag catacactgc tataataatc aaacttatgt 240
gacctgagtg cttcccagga attattattg atttatgtgc caaaatattg atacagtccc 300
tgaggaagcc tcaaagcata ataagtgtta cttcagacac aagcttcagg actccttaac 360
aattcctgcg tgtctaattg gctagctcct caggctgact gcccttttcc tgtttccaga 420
caaatcttcc ctaaaactca tggtcagatt aattttcctc aaatacagtt tacctcaaca 480
actttccatc accgcgctcg agccgattcg gctcgagggc gattgatgaa ccaggcggtt 540
ga 542
```

<210> 65

<211> 586

<212> DNA

<213> Homo sapiens

<400> 65

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aaattctttt tgacatctct cagggttata tttttttcct ttaactcata tgtcaccatt 60
agggtttttaa aatcctttta aatattttat ttctagtgtg ccttggagtt ccccttttcc 120
tccttttttg ggaaagtttt gaaaatgttt tgtttttgtg tatgaaaaga atagctcacc 180
aaggaagaag gggagtgttt ttggtgaaat aggaaagaag tctgaaactg taggagagga 240
ggggaatatg gccgctgata aaaagcacta gaggaggggg gaaatactct tccataggaa 300
ggcttccagc tacaaagatt tgaagacatt tttctgggga agtaaaacac taaatcagca 360
ttattttcca aagcccagaa aataacttaa tagattgttt tttaaatact gttttaattc 420
agcttgtgaa gatattctga atagttcatg tagaatatct tactattttg cagatacttt 480
tgtataaata gttgccagtg agaaatgttg caactgtgtc ttttcaaag aagtaaatag 540
gagagctagt atagcgcctg aaagaagtaa gtgagttata ttgtac 586
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<210> 66
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 66
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 cattaggttt ttaaaatcct tttaaataatt ttatttctag tgtaccttgg agttcccttt 120
 ttctctcttt ttggggaaaag ttttgaaaat gttttgtttt tgtgtatgaa aagaatagct 180
 caccaaggaa gaaggggagt gtttttggtg aaataggaaa gaagtctgaa actgtaggag 240
 aggaggggaa tatggccgct gataaaaagc actagaggag gggggaaata ctcttccata 300
 ggaaggcttc cagctacaaa gatttgaaga catttttctg ggggaagtaa acactaaatc 360
 agcattatTT tccaaagccc agaaaataac ttaatagatt gttttttaaT tactgtttta 420
 attcagcttg tgaagatatt ctgaatagtt catgtagaat atcttactat tttgcagata 480
 cttttgtata aatagttgcc agtgagaaat gttgcaactg tgtcttttca aatgaagtaa 540
 ataggagagc tagtatagcg cctgaaagaa gtaagtgagt tatattgtaa cttcttgctc 600
 tacctcaggg taagcactcc ttttagcatt tattaaactc tcattatttg tagagaaatt 660
 atttagatgt aggttgagta ttctaatact gaaaatctga aacacaagat gctctaaaat 720
 tcaaaacagg atgctcaaag gagatacttg tttgagcatt tcagacttca gattttcaga 780
 ttagggatgc tgaactggta agtataatgc agatattcca aaatctggaa gaaaaaaaaa 840
 aaaaaaaaaat gagcggtc 858

<210> 67
 <211> 593
 <212> DNA
 <213> Homo sapiens

<400> 67
 gtgccttttta tgctcatatg caagtTTTaaa cacaatatga atctcccatt ctcttaaact 60
 agaggctaaa aagaggacca ggtgttcaca cagaacttgg cagatgatgt tggccagttt 120
 gaacgtggag aggattgaaa atggctgagt agggagggat gctgagcggg gcttgggcct 180
 ctagcagctg ctaattttat agaatgcgct aaaataaacc ttgtggatag atcttgccctc 240
 agccttttct atctctggtc cttggacaga gaattgttta agtcatttca tgtttattga 300
 gttatttttg ttaatcatca gtacagattg cctctaagtg gtttttgcac ctttttttta 360
 ttatcgcttg gtcacataac ttctcggaac ctacagtttc ttatttaata ctctcaaggT 420
 tgaatattaa atcatatgaa caggatttgc aaactataaa gcaatgctat gcatgtaagg 480
 tgtcttttat ttgccagtta ctgagtcttt aagggcaaat tgtctactca atacttggtt 540
 tactgtgtta ggattccatt agggaagcag aacccttata aatattgtgg aat 593

<210> 68
 <211> 578
 <212> DNA
 <213> Homo sapiens

<210> 71
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 71
 ggggcttggtg gttaccgatg gaaacctgga gaagtgtgcg ggctacatca ttctttcttt 60
 caacagactc ggagtgtctg ccctgggcca ggaactctgc ctgacctccc agatgagggtg 120
 tgtgtctaga accgttccct tgggaaggga aggagagggc tggggtatgg gggagcctgg 180
 acatgaaaaa ggactaccct ctgacagtaa catttccctt ctacttattc aaggtctgta 240
 tgtgcccaga cggtgccatg caccttggtat acattagctt atcccgggtg tcacaaacca 300
 tctctgagat gggccattac cagtgtccaa atttcagac atcgtgtcca aaagcccaac 360
 ccaagcctgt ctgcaccacg agcctgtgcc ccttcaacac caagaactgg ttaaataatt 420
 aaaatctgaa 430

<210> 72
 <211> 239
 <212> DNA
 <213> Homo sapiens

<400> 72
 tgggagacaa acataccctc ctgaccttgg ggaagtgttt tccctgctct tgtgtccaag 60
 ggggagttgg caggactgtt agaaatgagg gatgggcctc catttgccc accatgggccc 120
 aaatctccag agctggagag tagtaatttc tcccccttgg gagtgggtgtt gattctcttc 180
 tctctagagc tcaagtcctg ggctagcagc tggagaacag gactctgagg gactttcat 239

<210> 73
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 73
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 <213> Homo sapiens

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 <213> Homo sapiens

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<210> 78
<211> 72
<212> DNA
<213> Homo sapiens

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<210> 79
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<222> (234)..(388)
<223> a, c, g or t

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<220>
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<222> (34)
<223> a, c, g or t

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<220>
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<220>
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<220>
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<220>
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<210> 81

<211> 4158

<212> DNA

<213> Homo sapiens

<400> 81

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<211> 270

<212> DNA

<213> Homo sapiens

<400> 82

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270

<210> 83

<211> 612

<212> DNA

<213> Homo sapiens

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<222> (349)..(456)

<223> a, c, g or t

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<210> 84

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (268)

<223> a, c, g or t

<400> 84

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<210> 85

<211> 1035

<212> DNA
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<222> (97)..(179)
<223> a, c, g or t

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<210> 86
<211> 662
<212> DNA
<213> Homo sapiens

<400> 86
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ac 662

<210> 87
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 <212> DNA
 <213> Homo sapiens

<400> 87
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<210> 88
 <211> 528
 <212> DNA
 <213> Homo sapiens

<400> 88
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<210> 89
 <211> 1282
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 <213> Homo sapiens

<400> 89
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tttaagagaa tgtgctgaac aatcagggcc cagaaaggca acaacgaata ttttgcattg 660
caagaaggag gcaaaagagg aagtggatt gtacccaaat aatgcttata ataggtgtta 720
ttttagctga gctgtaagct ccaggagggc aggggtattaa tatattgagg tgttggtgta 780
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gagaccagga gttcgagacc agcctgggca acatagcaag acctcgtctc tacacataat 900
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aggatcaccg gagactggga ggtcaaggct gcagtgaagt gtgtttgcac cactgcactc 1020
cagcctgggg gacagagcat gaccctgtct caaaaaaaca acaaaaaaag aagcgggaaga 1080
agaggaagaa gaggaagaag aggaagaaga ggaagaagag gaagaggaag aggaagaaga 1140
agagaagaaa gaaaggaaga agaagaagaa agaagaagaa gaagaagaag aagaagaaga 1200
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agagggagga ctctacaaat aa

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<210> 90
<211> 286
<212> DNA
<213> Homo sapiens

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<220>
<221> unsure
<222> (259)
<223> a, c, g or t

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<220>
<221> unsure
<222> (263) .. (264)
<223> a, c, g or t

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<220>
<221> unsure
<222> (268)
<223> a, c, g or t

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<220>
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<222> (271)
<223> a, c, g or t

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<220>
 <221> unsure
 <222> (277)
 <223> a, c, g or t

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 agaggaatth tagtttatgc tacaatatca agatatctga tttaatccat gcatctctga 180
 aggatgtatt ggtttcttat ttcttttaat tgagagagtt gttgaatgat ttaatagaac 240
 tttggaatth tcaaaaaana aannaaanta nattaanaaa attttt 286

<210> 91
 <211> 644
 <212> DNA
 <213> Homo sapiens

<400> 91
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 tatgcagtgc cagaagcttg tgtgaggagg tggaaattht tgcacaaaag ccagaatttg 180
 actagataat acttttcaaa ttgtggtccc tgcagtggca ttacatggga acctggtata 240
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 gaaccactgg actaaattat gttggttttt caatggcagg tgaataacag gcaatggaaa 420
 tgcattggaaa tgcatttctg agcacagttt tggacgatt aaagcattth atttaggtta 480
 tagagtcttc tgtcttattt ttctagtaga ggaatttttag tttatgctac aatatcaaga 540
 tatctgattt aatccatgca tctctgaagg atgtattggt ttcttatttc ttttaattga 600
 gagagttggt gaatgattta atagaactth ggaattttca aaaa 644

<210> 92
 <211> 870
 <212> DNA
 <213> Homo sapiens

<400> 92
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 ttaagcgaatt tatttggaat tttttccctt atgacaaaat ttatcaatca atggtaactc 180
 ctttagtacc ttggtcattt gatgaggtgt tttctaggga atttggtcgt tcttagtata 240
 taattcagct attttcagtc agatccaatc ttttagatata aaaatatatc atttgattaa 300
 tggtagttac aagaggggtga aagcgggtact gtttatcaga ttctactcct tctcgctctt 360
 aggacggcct catctgacag cctcctgact aattatggcc acttggtact acttctctgt 420
 gttccaagtg cgtaaaacac atgcaagggtg ccaacaatga gaagtcactc tctccagcca 480
 ggatttccct cattgtgttg gcacaacgaa tcaaaaattaa tgtataatgt tcattttttt 540
 agaactctcc ggtctttgaa ctttcctctt tgaaataaaa atttctcttc tgcccattgt 600

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gaattagagc ctcatttcca cataaagcat ttgtatttgc ttttagtgat ttaatactgc 660
tttttagttt tgctttatct gtactaacca atagtcatag ctttttgact ccttttgact 720
tttacatttg ttgttaattt cagtatctca agtggattta tgttaccatt tcaaataagg 780
agtttatata gcccgggcaa tgtaagggtg ttttaataaaa ccaaaggaca aaaattaagt 840
aaacttgaaa gaatgtcaac tgaaatatct                                     870

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<210> 93
<211> 499
<212> DNA
<213> Homo sapiens

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```

<400> 93
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gttctgccct ttctacagtc tttctactta gttaacgtag ttctcctagg ccacaatgct 180
tttaccacat acaacatctg tttaacagtg gttatttatt caagagctgt tatctctttg 240
acataagctg gaaggtagga ggcattgggtg acttttctct gggatttcag tattagatat 300
gtccttggtg gccatatttt ccacagtgtt tacaaattag acaaatcagg gtttctgggt 360
ggctaggaag gtgagagttg atgaatgtga gagagaaata aaacaaactg gcagaaggaa 420
ggagagggtta aagaaatcct gttcatttca aaggcttgct tgattctctg gccgtgtatt 480
ctatgaaaca tccttgaat                                     499

```

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<210> 94
<211> 654
<212> DNA
<213> Homo sapiens

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<400> 94
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gttctgccct ttctacagtc tttctactta gttaacgtag ttctcctagg ccacaatgct 180
tttaccacat acaacatctg tttaacagtg gttatttatt caagagctgt tatctctttg 240
acataagctg gaaggtagga ggcattgggtg acttttctct gggatttcag tattagatat 300
gtccttggtg gccatatttt ccacagtgtt tacaaattag acaaatcagg gtttctgggt 360
ggctaggaag gtgagagttg atgaatgtga gagagaaata aaacaaactg gcagaaggaa 420
ggagagggtta aagaaatcct gttcatttca aaggcttgct tgattctctg gccgtgtatt 480
ctatgaaaca tccttgaatc ctgggtttct taagttggct ggagtgggct gctgtaattt 540
gagggttaaga aaagtccaaa ttaatatatc atccctccag tgagctgcaa atattattca 600
tatatactat aaataaaactg ggtgataagt tggttttaat taatgatatt ccaa      654

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<210> 95
<211> 431
<212> DNA
<213> Homo sapiens

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<400> 95
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 ttgacacaga tctattcatt gaacatttaa gaattgtctt ttcatacatat cgtatatctc 180
 atatatatga gagaacatct tttagtaaagc tttacaagtg gtcttctttt tacatattaa 240
 catgttgatg aatgtttaaag tagcaaagac tcaagccctt accataactaa tgtttcttct 300
 tttcaagaca gatctttatg ggcagaaaca cagaaatgga agtagcagat ttttaagaaaa 360
 ctgattcaga ctttgaactt gtatgacctt atattttattg atttatttga gtcataagat 420
 ttctgggttt t 431

<210> 96
 <211> 616
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (15)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (61)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (191)
 <223> a, c, g or t

<400> 96
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 caattgcccc tgggggcaac agacttaggt tttcatgtga gcttggctcg ggccatggct 180
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 atgaatctgc aaacag 616

<210> 97
 <211> 1636
 <212> DNA

<213> Homo sapiens

<400> 97

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aaaattacgc cttaatgttc caagcaacac gaaacctact ctgtgccccca gggcaggtgc 180
cggcgggcagc catggccccc accagctcac atgaaaccta gtctgtgccc cagggcagtg 240
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tgccggtggc agccatggcc ccgaccagca cacaggaaac ctactctgtg ccccggggca 360
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caggtgcagg cagcagccat ggccccgacc agctcacagg aaacctagtc tgtgccccag 480
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cagggcaggt gccggcggca gccgtggccc cgaccagctc acaggaaacc tactctgtgc 660
cctgggtcag ggcaggtgcc ggccggcagc gtggccccga ccagccccca ccagcctcag 720
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<210> 98

<211> 638

<212> DNA

<213> Homo sapiens

<400> 98

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agggttttgt tttggactgt aatattttat agaaatttta ggattacttt cataaaaatt 180
tcttaatact tcagagctaa ttcaagaaac ctgtgtgcat taacgtcagg aagttaactg 240
tcccacataa ttgccttgga gttgttctga attgttgatt atggctcaca ataattatct 300
gacagggtttt tgggttaggaa tttttctgct gccacacact gttcctgttg agaatgtaga 360
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ggttttctaaa tccagaaaaa tgtattttgt tagactatga gtatccctaa tctttaacat 480
gggttaattg gatgggtgggg agtatttgct ttgatttcct gtgtataact caccgatggg 540
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tttccattgt ttgattttct tcgcggatag gtttttcaga ttacaattag tctaaattag 600
ctggtgcggt ggacatgact gtaatcccag cacgttga 638

<210> 99

<211> 1253

<212> DNA

<213> Homo sapiens

<400> 99

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ttctaataga gtgataagat attctctact ttgctctcat tctgaaaatc agctaccatg 180
aatattataa cttacatctg ttatcttgct tcagcatagt aatatttaaa gtgattaaag 240
gaaacaaatg tttaccttcc aaaagatgca ttcattttat tcatttatat aaaaaaactg 300
cacgtttaat atatacattt tgagtgaagt cattgttaat taagggatgt tacagcccct 360
tttgactat gaagagactt tatgattttc tttctgttaa gggtagtatt tacataaaaa 420
ataatttcat caaaccagag agaggccaac agacattaca tgtcatctca ggtgggtcca 480
agcagagatt atctcagaga gctctttgac catttaattt ataaataatt ctacttgtgt 540
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cagggttttg ttttgactg taatatttta tagaaatttt aggattactt tcataaaaaat 660
ttcttaatac ttcagagcta attcaagaaa cctgtgtgca ttaacgtcag gaagttaact 720
gtcccacata attgccttgg agttgttctg aattgttgat tatggtctca aataattatc 780
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gcctggtgag gtggcacatg actgtaatcc cagcactttg aggaaggcta aggcaagcgg 1140
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<210> 100

<211> 1479

<212> DNA

<213> Homo sapiens

<400> 100

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acagcaacat tcctgtggag tatagatggc tatgactaag gtagtgtaag tgggtggtcct 180
tataaaatat gctctgcttg ccttagggga aaatagttcc ttaaaaacgt tctcatccaa 240
ctcctcagtg ttaagatatc taaacaaaag tgaccacatc tatacacaac agtaatgaca 300
cctgaaagaa ttttttaaca gataaagaac agtactccca tggttatgta accaaccaac 360
taggaaggag agacttttaa attgacaaca tcccagagat gttatatcct aagttatgaa 420
tgtgctgccc ttgaagaaaa atcagctttc tcatattact cacatatata tattattaca 480
taacaatgtg ttaaattgga ctacagtga tcaaagagtt attgcagctt ctgaagggtga 540

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cagactttta actttcagat attgcttaat gcctgggaaa ccctgggaac cacgccaagt 600
caatttaacc aagcttttgc ttttttagcca gctgtgatgg tggtttctac atagtctgga 660
taaataccaag aatactttca tggccctagt gaaatttgcc tttttgaaat tattaggaaa 720
acgaaataca cattatgaaa cttctatcac tcctaaagaa aggggaaaac ctattaanaa 780
tgaagctctt atttactaat gcatttctat ttcaggagca tttggctaaa ctggggacaa 840
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aaatctaaaa actaataaac atctataagg ttaaaaaaa 1479

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<210> 101

<211> 2313

<212> DNA

<213> Homo sapiens

<400> 101

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ccttagataa ccttagaata tatcacttta tacagcattg tattttaaga tacaaaaatt 180
ggagatagtt ctcaagcatc tttccagtcg tgcttgtgaa tcttagccca agatagggttc 240
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cccatcatct ccctttccca tcctgttaac atttgggtgt gatagattta gataagttga 660
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aaaagaacta gaaagaagct catatgaaag caccaccttg tggtcagtaa gcttcaggat 1620
agctctgttg acagcagggc atttagagag tcccaagtat agtcatgtat cactggggag 1680
ggaagaatct ttgaggacat ctagtttaca atctttatta tttttcaggt gtagaaaaga 1740
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gtaatggcat tgcccagact ccaaaatcct gaccagaata taaatcacca attggtgggt 1860
taaagggggt atttgtgaat cattttccaa aaaaagaagt acactttttg tgttacttac 1920
catttcaaag aaacttattc ttcaagacca tttcagattt ccttaggaat gtatgtgtta 1980
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atgttttaa ac atgcattaaa ggattagttc tatctcaaaa gacaaaataa aactcgaggg 2280
gggctccgta ccctattctg ccgatagtga ctt 2313
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<210> 102
<211> 217
<212> DNA
<213> Homo sapiens
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<220>
<221> unsure
<222> (138)..(154)
<223> a, c, g or t
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<221> unsure
<222> (159)
<223> a, c, g or t
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<220>
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<223> a, c, g or t
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<221> unsure
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<223> a, c, g or t
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<221> unsure
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<223> a, c, g or t
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<220>
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<221> unsure
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<220>
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<220>
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 <222> (198)
 <223> a, c, g or t

<400> 102
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 cacctgagat ctcacactca atttatccat tgctgaaatc tgtggcaaag ctaccctga 120
 tcgagagatt ccatctcnnn nnnnnnnnnn nnnngtcant tttaaaggct ancatccaag 180
 anttggngn gnatgtgngc atgtttatat ttagaag 217

<210> 103
 <211> 667
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (231)..(542)
 <223> a, c, g or t

<400> 103
 acacaaaagc gtattgtggg ggagaaacgc cagcaaaagg aacacagaga aagatcttaa 60
 agtttcactg ctaaagggat ttattacata acacggccac cttttgccag ccagaccaa 120
 ccgaaagagc aatggctgta tttctgaaag tagcattctg tccggccgaa atatggtaat 180
 gagatttaaa aagatttttt taaaggagct caatgggtaa aagtcagctt nnnnnnnnnn 240
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 300
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
 nnttcctct aaaacttgcc acacaaagat tatttttcct tctctgtctg cacctgagat 600
 ctcacactca atttatccat tgctgaaatc tgtggcaaag ctaccctga tcgagagatt 660
 ccatctc 667

<210> 104
 <211> 451

<212> DNA

<213> Homo sapiens

<400> 104

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ataacattct agaaataaat tgtttaatat aaaatacaact aatatataat aatgtattac 60
ctaacatatg attatatata actataatgt gtactgtttt acatatatat ttccaaagta 120
tactataaat gcacttccgc actttgctct ttttactaaa tatatcttgg aaatcatcct 180
ttattcgtac ataaaaagct tcatagttcc tttttatggc tgcaaaatgt tccagcttat 240
ggatggactg attctctatc gagcaacatt aagattgtgt cctatcttac tattcctaata 300
tttgctgaag tgaatttctt ttgccatgtg atttccacag gtgtatatat gtagcgtaata 360
tagtactagt agaaagtaga attgctagat caaagagtat gtgccttgta attttgatga 420
tattgtgaaa tctcttccac agaagttgtt g 451
```

<210> 105

<211> 852

<212> DNA

<213> Homo sapiens

<400> 105

```
ggacggagtc tcaggtcagg aactgcagtc atctcctttg ctgggtttca gcatttccct 60
ccttggaat ctacttctat ctgcaggttt tttatacctt atgttcacct ttggttgat 120
ggaagtcgtt ctcttactgt ttaatccaac ctccagtgc agaaagtagaa ttaactaaaa 180
cacaagttag gctccatgct agccaagaac tcagtttttc ttggtctgca gatgagggga 240
tgttcagtat cctaacctgt tctctgggtc caggatggtg tttctctggg tgtgggtcac 300
gagcctccca tcttagaatc ttctaggagc cgggaagtgt gcaagctcta gagccctact 360
ccggacttgt tgaatctgaa tgtgttagtg ctggggctca ggacctgtga taggaaagtc 420
acagaaagca tagatctgtc tgaagaaact gctgcagcct ccattcattt ctttcttcat 480
cttccaggcc atgacttcga actttgttag gatccaacct gcaggagat ttcatgtcag 540
ttcagtcaca cacacantca cccactagca tcgctgtatc caatatcttc tctggatgtc 600
aggagagctc tgtgctggcg ctcaaggacc tcagggtcta gttgaaggaa tgaagtgtgc 660
tcatattaaa agaaaagtag caatgcaaag caaagaaggc caagtgcaaa tgtgcagtgt 720
aaacttgatt ttaagggagg ggagaggcct tggccttggc caggatccca aggaaggagc 780
tgaagacatg gaattggagg cagtgaagaa ggtggtcttt ncagagggag cagtgttgac 840
aagccccctg ta 852
```

<210> 106

<211> 456

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (84)..(129)

<223> a, c, g or t

<400> 106

```

taggttactt tctctactaa tagtctttcc agaaatcttt catatttcat ggggttattt 60
ggggattcag aaagccaccc agannnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120
nnnnnnnnnc actgcatttt aggaaggtga gaatttagag aagagaacac cacttggaat 180
ccctgcttag cggatgaatgt gaaagtagac atagtggttt cccctttctc aagtgactgg 240
gtcttacttc aagtaaatta gacatttcct ggagatcagg gggtgtgtat tttcacttct 300
ctatatagcc atagtactct ttaagagttc actaactacg tgttaaatgg gaactcatga 360
tggttaacaa tagctcagtg gagatgttct acagttattt catacatgct actttgaagt 420
agctcagctt attttgtgaa gtgagtgtat gtgccca 456

```

```

<210> 107
<211> 501
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (393)
<223> a, c, g or t

```

```

<400> 107
cacagaacgt catagggagt agtgcaccat ctgggataca aaacaagggtc ctaagctagg 60
attgtggatc acaacggatg aatccaggat ctagtcttcta gtgatacaag agaggggactt 120
ggttatgaat aactagataa aatcttagtg cctgaaacta ggtcacaata tcagagcagg 180
atcagcagaa tgactgatcc tactgagcag ataagctacc agtctgaggc ttctaaaaat 240
tcctccagta tagagcacca gcccaggccc tgaggccaag ataagattcc aggtggaact 300
tcatggttcc aggtggccaa agggctggag ggctttgcct gaaaagatca ctgcagatag 360
tatttgagaa aattactcaa aaccagcctt ggntatatct taggcaagaa ggaaagtatt 420
ttaaagact ttgtgaattt gtttcagttc acttggtttt tgtggagtac attttactca 480
tctgatacac aaacttcata g 501

```

```

<210> 108
<211> 377
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (317)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (333)
<223> a, c, g or t

```

```

<220>

```

<221> unsure
<222> (341)
<223> a, c, g or t

<220>
<221> unsure
<222> (369)
<223> a, c, g or t

<220>
<221> unsure
<222> (374)
<223> a, c, g or t

<220>
<221> unsure
<222> (354)..(355)
<223> a, c, g or t

<400> 108
actgtgcctg gcctgttctt taaaatatga gataatatat ctgttggatg gatgcctaaa 60
agtgggaattg cttgggtcaaa gaaatgtttt tttagttgcc ctctatagag actgtaccaa 120
ttaacagaat aggagtcttg ctgcatggga tattgttaag acttggtggg cctttgttaa 180
tataagagaa aattgggtggc ctttcagaat ttaagtagta tttttgtaga tacatattta 240
agagtgattt ttgtgtgtga actgtttatt ttttgtcatt tattctattt gattgtgggt 300
tatctcattg attgtangaa ctctttgcct tcnttttctt negatctgac aaannttttc 360
ttttcatgng gatntcc 377

<210> 109
<211> 884
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (108)
<223> a, c, g or t

<220>
<221> unsure
<222> (140)
<223> a, c, g or t

<220>
<221> unsure
<222> (300)
<223> a, c, g or t


```
accacgtccg gccctcttc tcttaattta aatgttttct tcagcaaaca gtatcctagg 60
agcattgctc atatgggccg gaatgtcctg gctgcccac gaggtgtct gtagataccc 120
tttgctgct tcagtccaa gtgaacatcg cagagatctg ccttgtgtct ccctgcaccc 180
ctggctgcag gggagctcct gctgcctcct ctggagctgg tgggggcctc actgccatcc 240
ttggatccct tcctgccgtc agcctgctgt cctcagtgc ctgggaggag ggggtgctgt 300
gtggttgtgt tgagccttca taggtgtcct ctggtgggct tagaatggg gttcttaatc 360
ccccccagta tgtggataga attcaggggt ctgtgaacat ggatgaggaa aaaataacat 420
tattatttat tactaatgta gctaaaatat gtagtgtgac ctttgattat aaatgtagac 480
aataaacctc acagcattag aaaggcctgt gactaccac ataacaaaca agcacattgt 540
tgtccctgaa ccc 553
```

```
<210> 118
<211> 593
<212> DNA
<213> Homo sapiens
```

```
<400> 118
accacgtccg gccctcttc tcttaattta aatgttttct tcagcaaaca gtatcctagg 60
agcattgctc atacgggccg gaatgtcctg gctgcccac gaggtgtct gtagataccc 120
tttgctgct tcagtccaa gtgaacatcg cagagatctg ccttgtgtct ccctgcaccc 180
ctggctgcag gggagctcct gctgcctcct ctggagctgg tgggggcctc actgccatcc 240
ttggatccct tcctgccgtc agcctgctgt tcctcagtgc actgggagga ggggtgctgt 300
tgtggttgtg ttgagccttc ataggtgtcc tctggtggg ttagaatggg ggttcttaat 360
ccccccagat atgtggatag aattcagggg tctgtgaaca tggatgagga aaaaataaca 420
ttattattta ttactaatgt agctaaaata tgtagtgtga cttttgatta taaatgtaga 480
caataaacct cacagcatta gaaaggcctg tgactaccca cataacaaac aagcacatgt 540
agtccttgaa cccaaaaaaa aaaaaaaaaa aaaagatctt taattaagcg gtc 593
```

```
<210> 119
<211> 94
<212> DNA
<213> Homo sapiens
```

```
<400> 119
ttaaaatttt taaaaaata aaaagaaaat cttgtgactt tatccccagt ggaaatcaca 60
ggtatttcat atgaagttat agttactgct gata 94
```

```
<210> 120
<211> 82
<212> DNA
<213> Homo sapiens
```

```
<400> 120
gaaaaaagcc attctgcaac atgaaagtgc aagggtgctga tgtagcagct gcagcaagtt 60
atcaagaata tctaactaag at 82
```


<210> 124
 <211> 450
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (384)..(386)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (396)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (398)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (405)
 <223> a, c, g or t

<400> 124
 taattattttg catgaaataa atcatcagtt gaaacttact atattaaaaa acataaaaaat 60
 aagccctttt ttacacaca ccagtgccctt gaaaaactgg cttgccaaat tcaaaatggc 120
 aaaattaata aaatgagtag ctaagcattt tatttgcaat tgtatctttg catttatttt 180
 tagagcataa tcgagaaata tatttattga ttcctaaagg aaatgtttac tttcctttat 240
 ctggtaatta cggaaacaaa ttgcctgggc acatttgaaa taaatgaatc anatttgagt 300
 caatgtgtta tagataacta aagttacatg attgcaattt attcacagag tgttttttta 360
 aaaaaatcat tgaagtgact ggannnaatg tacttnantg aaatnttaaa aaatggagaa 420
 gagtctcagc atgaagtgcg gaaggcttct 450

<210> 125
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 125
 gtcttctagc tcccggaact gagcgttctt gccttgcttt ctctctttcc tctcatttat 60
 gctattttctg gcggtgtcatc actggcttac ccattatgta agctttaagt gaaaaaatca 120
 gatgttattt tcatgagctc tgagggcact tctgcatttg ttctcatttg actcttctga 180
 agcctggaga tgcacaggaa ggcagtttcc actgcagatg agcagcatgg aggaggcttt 240
 tgggaagtga atgaattgtc caaggtccag aggtgaggag ctgggaccag gcctcacagg 300
 cttctgttct gtggtcctgt cccgtccctg gtttctgctc tatccagggtg gtgccttcta 360

gttccttcct aaccaacaag tgtgggaggc tgggtgtg

398

<210> 126

<211> 658

<212> DNA

<213> Homo sapiens

<400> 126

gattttattg ttgatgggaa atgacaccaa atgtcatttc aggaataaat aaccatggca 60
gttctaaaaa cttggcacia atatatgagt tgcgctgaga ctggggtagc tccatccttt 120
atccatggag attggcaagt gacaactcct gctccggtc cttcgtgcat tccccttatt 180
gtgaggaagc gagagggggc ctctgtcttg tgtcccatg cctgtgtcac tgcctctctt 240
ttcaccagc gtgttgtctt ctactctccg gacctgagcg ttcttgctt gctttctctc 300
tttctctca tttatgctat ttctggcgtg tcatcactgg cttaccatt atgtaagctt 360
taagtgaaaa aatcagatgt tattttcatg agctctgagg gcacttctgc atttgttctc 420
atttgactct tctgaagcct ggagatgcac aggaaggcag tttccactgc agatgagcag 480
catggaggag gcttttggaa gtgaaatgaa ttgtccaagg tccagagggtg aggagctggg 540
accaggcctc acaggcttct gttctgtggt cctgtcccgt ccctgggttc tgcctctatcc 600
aggtggtgcc ttctagtctc ttcctaacca acaagtgtgg gaggtgggt gtggtggc 658

<210> 127

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (142)

<223> a, c, g or t

<220>

<221> unsure

<222> (152)

<223> a, c, g or t

<220>

<221> unsure

<222> (167)

<223> a, c, g or t

<220>

<221> unsure

<222> (171)

<223> a, c, g or t

<220>

<213> Homo sapiens

<400> 128

tacaaaacaa aaatgatcag tgagaagcta ggtggcgta aatgcccggg caaaaagggg 60
ttaggtctgc agcgctatac tcagatgtaa cttacagatg caactagcgg aaa 113

<210> 129

<211> 689

<212> DNA

<213> Homo sapiens

<400> 129

cacaactcta gaaggtgcct gtcacaccgt tttgtatgaa aggtgcctcc tagagtatag 60
ctgtacagta gactcatttt tgatataaga agggataaag cacacttgac agatgatatc 120
aaaatgtaaa agaaaagaag tgtctgtttt agaaggaagc tgtatgagat aataggccaa 180
ggttaggggtg gtggtagcca tgggtggtaaa aataggatca cttaatctag attacttaat 240
cagtaagttg attccagggg ccagtgggaa ttgctgaaag tttcatctga atacatggaa 300
tttttagcag tgattagggg aatgggtgctg gtattttatag ccatgaaactt attacttgaa 360
agcatcctag ggaccaagt cttaatcaag gggcagttct tccaagtagt gggtgaggaa 420
gttggggtatg ctttcacaaa cttctttcct cactaaagat tgcagatata ctctgtaagt 480
gacttcacag aatatactca attgtcatat ttttaatttac atgtttcttc tgattatagg 540
tcccacgtga ttataagttc tgagatcaag ggtcatcttt gtgggggtgt gtgtgtgcac 600
ttaaattttt tatgtgctgg taatagttat cttgtggata ttttaagaaat aggaatgtgt 660
gccatatttt aaatacacct tatatgcaa 689

<210> 130

<211> 1901

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (1582)..(1837)

<223> a, c, g or t

<400> 130

tcttttaaac tgtctttacc ttgctcccat taatattcac atttaaggta accgctttca 60
taaaaaacatc actgaataac tccccctggg cctgtcagtc cagcattatt ctcaccattt 120
atagagtttc aaatattggt aaactgtagt ggctatcttg cttttatgta ttttgggttt 180
atgcacattt cctccacaga ataggaattg ttttcggtat tgttctctat ctcttctcca 240
agtacctagt cagcaacccc ccatgggtgc tcagtaaata ttgaatgatt atacttaacc 300
tcccttcata gctcagacta ttccatgaac aatttatgga cataaaaaatc tatgccagta 360
gacatttaag gatatttttt atggtgacta tggaaattgc ctgggttaca atttatatat 420
agagtcagta acattgataa aaacataaca aattactgtt tcatggaact catgaggcat 480
taagaggctt atttagtttt gtttagatac aaggtagtgt cttccaaaac attgttactt 540
caaaattttt gtagctgctc cagttgaaca ctatatataa atgcacattt ttgaggacat 600


```

attcttgaaa ttaggaatgt aattttttaag aattaaacag aggaccagaa atagatctga 660
ggagtttatc agagctgctt ccttgcacaa ctctagaagg tgcctgtcac acctttttgt 720
atgaaagggtg cctcctagag tataactgta cagtagactc atttttgata taagaaggga 780
taaagcacac ttaacagatg atatcaaaat gtaaaagaaa agaagtgtct gttttagaag 840
gaagctgtat gagataatag gcaaagggtt ggggtggtgg agcaatggtg gtaaaaatag 900
gatcacttaa tctagattac ttaatcagta agttgattcc aggggccagt gggaattgct 960
gaaagtttca tctgaatata tggaattttt agcagtgatt aggggaatgg tgctggtatt 1020
tatagccatg aacttattac ttgaaagcat cctagggacc caagtcttaa tcaaggggca 1080
gttcttccaa gtagtgggtg aggaagttgg gtatgctttc caaaacttct ttcctcacta 1140
aagattgcag atatactctg taagtgactt cacagaatat actcaattgt catattttta 1200
tttcatgtt tcttctgatt ataggcccc cgtgattata agttctgaga tcaagggtca 1260
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ggatatttaa gaaataggaa tgtgtgccat attttaaata caccttatat gcaaaaattt 1380
taatgtaatt taagtatatc gcaaaaaata aatagcgggt ggtattcaca ctgcagagga 1440
ttggcaagtc tttttactat acttcaaaca attgttggca gaaatccgcc tcatgcactg 1500
tattgaataa tttgaaacat tagcatttaa ctaatccaaa gctaagataa agagattttg 1560
agggtgaggtg ataaatatat gnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 1620
nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 1680
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nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 1800
nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnttt aataggtata ttttcgattc 1860
atgattgaat ccatgataat ggaaccatt gatatggagg g 1901

```

```

<210> 131
<211> 436
<212> DNA
<213> Homo sapiens

```

```

<400> 131
gctcgagtaa ggcattcaat aatgtctttt tgcttccgat tctagctgta taacataggt 60
aaatctctta aattctcaga acttcaattc atttatatgt aaagtgagga gttgtaccat 120
attggtagtt attaacatgt actgtactta tgaatcagtc tgaaaatctt gctaaactgc 180
atattctgag cttttcttaa tttttttttg ttttctcgga aacgctgatt ctctaggtct 240
tggttggagt ccaggtatct gcaaattaaa taagcacttg aagtgatagt atctgagtgt 300
ccgtaggcaa atgttaggag aactgaatca gatgttcttt gaaagatttt catggttcta 360
aaatgttctg atttaaaatc caciaagaaa aaaagcattg aaaatgaatc agcaaactag 420
atgtaattaa agcttc 436

```

```

<210> 132
<211> 498
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (434)

```

<223> a, c, g or t

<220>

<221> unsure

<222> (488)

<223> a, c, g or t

<400> 132

```
gaaaaaaagt ggaaacattt ttttaaataca agattttaaaa aaaaattaca tttgtgatag 60
gtagaaaaca atctgtcaca cactgctttt ggtagttgtg taagtttgta caacctacca 120
aaatgtaaat ctgacagtat acatcaaagc cttatgatgg tcggcagtc atcgaggaat 180
ctattctatg ttgtacaatc aaggcgtact atgatattta ttgcagaaca gagagaaata 240
gcatatacat tgctagttaa ttgattaaat aaagcatgat tccttcaaaa attgagtaat 300
atgacattaa aaaccacaat ttcaaactat atttaagaag atacaaataa ttctttatta 360
ttactttttac tctcaggaat gtgtttgagt gatgcatttc caggcatcaa gtgagtaatc 420
caatattgaa gaanattaaa attttccaca aagtccccct tctagaagaa tgtgctcata 480
tcttttgnac agaaatga                                     498
```

<210> 133

<211> 422

<212> DNA

<213> Homo sapiens

<400> 133

```
tagaggagga aatcagggct gcttaggaat gttacataat gtattctgat ttgagttaaa 60
taaaaaaatc attatttgct catacatcag atgaagaaac ctgggaagat gaaatgtggc 120
ttgagttagt gggtaactgg atgaacgagt gattgagttg tcaactgttg gttagcggtc 180
atggtgaaca cgaagggagg catctgggga tatgccatat agctctgttc ttggccagca 240
cttgtaaaag acatttttaa caatgacata aatcaggtca ttggtggcac acttatcaaa 300
tatataaatg tcccaaagct caggggggat gtgaatgtaa gatgacagaa ttaacacttc 360
ccaattatct ccaaccaggc tagaatgaat acttagccaa agtccataaa ataacattca 420
ct                                     422
```

<210> 134

<211> 441

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (307)

<223> a, c, g or t

<400> 134

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tagtacataa aactgaaatg gcccaaaaaa catgaaaaga tgcccaactg tttattcttc 60
agtctcattt tttgctcatt tcttttcctt tgctttacta tagtaaaagt gactccagtc 120
```

cctacattaa attttgattt tgaatttttg catcttttcc ataaacttct tttctacagt 180
 gttttttaat tcaaagtac gtgtcttcat cttctctttt tttctcctgt agtttctttt 240
 attcggagtt attttaatga aggcaccaag gttcctgggt aatctcatgc tggctgatat 300
 tttttntaa catttaatat aaaatttttc acacataggc aaatttgaaa tgtttgcaat 360
 gaaatttttt atacctgcc cctagctatt accatgaata ttttagtata cttgctttat 420
 cacatatctg gtccatttat c 441

<210> 135

<211> 499

<212> DNA

<213> Homo sapiens

<400> 135

tagcttccct aacatgccag tctacagttt actccaaatc ccaccaggag aagccacttt 60
 aaaaatacct gataaattaa aattcattaa ttttaattcta ttaagtcttg ttagtcctat 120
 cattgtgccc attgctgaca caataccaaa tttacacagt tgcagtgcc gccatgagtc 180
 aagaaaatgg ggtctaattc ttcttgccac cttagtatcg aattattctg aaaaagaagt 240
 ggatgtactg atagatggaa agatcgaaat gattttttta ggagagattt tcttgcgctc 300
 atgataaaat aatcctggtg gaatagatat tgtatccatg cctcctcaag tacaggggtc 360
 caaagtcaag gccagacagt aagccaagtg ctatagaaat ttgtggtatg ggtacaatta 420
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<210> 136

<211> 701

<212> DNA

<213> Homo sapiens

<400> 136

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 aagaagaatg attgttcttt actgagtaag agaactacag agaccaatgg attcaagtag 120
 tggaacagct ttaatatgta acccatacct gtaccaatgg gtattgggtc tctagctcac 180
 ctttaggctg actagtatgc ctatgctgga tgttcaatcg cgggattaga cgggattgag 240
 ctttatttag tatctctatt agtcactatg agctataatc ttttagcccc tggatcatta 300
 tgaagtgcac caagaataag atacagtggg tcccaaggac tggatatcat agctaaccaa 360
 ctcagatggc taaaatacta ttcttgtatt ttataacctag tatttttggc ttgctttata 420
 atgggagtag tcattctggg aatctgatct tctaaatgaa agacaacttt atgcctatat 480
 tattttctatc ctgccaaaga tatgtaccaa acttgatttc tggggtttct gtgggattat 540
 acatttttct tggactttct ccccttttac tgaagaagtg atttttctaa aagacaccaa 600
 tcactttttc tttttctgt agggaggatg gtgggtggtga ggtgttcttt gcaaggaggg 660
 tagacaatga gatgaattgc actgaactag tgttaaagaa t 701

<210> 137

<211> 274

<212> DNA

<213> Homo sapiens

<400> 137

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gtaaaaacct aaatgcccaa taataggaat taaactggta aaataatatt gtcattttta 60
taatcagata aaatgatata gatgaatatt caatgacacg agaagatatt tataaatatt 120
ttattataaa aactatttta attggttaca ttatatgtcg ctatgccttc agagtagaga 180
gaagtgacag tttcaacaca aactgaaaaa tttgtaagat aatggctgct atttctaggc 240
ctgtaaaaat tcatttacc aaagaaaatc atag 274
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<210> 138

<211> 352

<212> DNA

<213> Homo sapiens

<400> 138

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gtaaaaacct aaatgcccaa taataggaat taaactggta aaataatatt gtcattttta 60
taatcagata aaatgatata gatgaatatt caatgacacg agaagatatt tataaatatt 120
ttattataaa aactatttta attggttaca ttatatgtcg ctatgccttc agagtagaga 180
gaagtgacag tttcaacaca aactgaaaaa tttgtaagat aatggctgct atttctaggc 240
ctgtaaaaat tcatttacc aaagaaaatc atagtttttt tttttttttc tggagatgga 300
gtttcgctct tgttgcccag gctggagtac ctcggccgcg accacgctaa gc 352
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<210> 139

<211> 647

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (318)..(552)

<223> a, c, g or t

<400> 139

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tatacacaca tatcctacat ctattctctg tgagcatttg tttctgttaa tatgtagatc 180
aagttctagg cacagaaagt tctagaagta tctattaaca gttgggtttg agttaagtaa 240
ataacttact ttctaaccac attttttcatt gatatgcgtt gtgaattttt tatactttgt 300
gtgtgtgtgt atacacacnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 480
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
nnnnnnnnnn nnaaacaatg aaaattaggt agtatgattt ttctaaacat atgagagtta 600
gagaaaaggc ttggatctca gaacaccctc tttgacagcc gggtgca 647
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<210> 140
<211> 334
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (44)
<223> a, c, g or t

<220>
<221> unsure
<222> (214)
<223> a, c, g or t

<220>
<221> unsure
<222> (300)
<223> a, c, g or t

<220>
<221> unsure
<222> (306)
<223> a, c, g or t

<220>
<221> unsure
<222> (308)
<223> a, c, g or t

<220>
<221> unsure
<222> (315)
<223> a, c, g or t

<220>
<221> unsure
<222> (320)
<223> a, c, g or t

<220>
<221> unsure
<222> (323)
<223> a, c, g or t

<400> 140
tgctacagaa catggcttca attaagagtg aattcagttt tttnttatta aagtcataac 60
ttacgtgccca cttttatggtt attctggact ttgggcagtg tgatttatta tgtctgtccc 120

tccattgaag tgtcactaac tttgtcaaaa atacctttca ctaattagag gtgccagaat 180
 ttttatactc gctactcagg aattgggtcac ttcnataatc tgaattacta taaccttggt 240
 cctcttttca tgaacagctt gagccactga cattctgttg tctaggtgat tacgtgaagn 300
 ttctangnta taatntggan acnagtcacc agtc 334

<210> 141
 <211> 990
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (105)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (116)..(117)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (132)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (143)
 <223> a, c, g or t

<400> 141
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 gcagatgata anagtgtagc aanagcagca cagagtttct tccaacgatt ggaactgggc 180
 gatatgcaag cacttttact gtggcaaaaa tttcgggact tgagcattga agagtacatt 240
 cgggtttaca agcgtctggg agtatatatt gatgaatatt caggagaatc attttatcgt 300
 gaaaaatctc aagaggtctt aaagtgtctg gagagtaaag gactcctact gaaaacaata 360
 aaaggaacgg ctgtagtaga tctctctggg aatggcgacc cctcctcaat ttgtactgta 420
 atgcgaagtg atgggacttc tctctatgca accagagatc ttgcagctgc tatagatcga 480
 atggacaagt ataattttga tacaatgata tatgtgacag ataaaggaca aaaaaagcat 540
 tttcagcaag tattccaaat gctgaagatc atgggatatg actgggcaga aagggtgccag 600
 cacgtgccct ttggagtagt acaggaatg aagactcgaa gaggagatgt cactttcctg 660
 gaagatgttt taaatgagat tcaattaagg atgctacaga acatggcttc aattaagagt 720
 gaattcagtt ttttcttatt aaagtcataa cttacgtgcc acttttatgt tattctggac 780
 tttgggcagt gtgatttatt atgtctgtcc ctccattgaa gtgtcactaa ctttgtcaaa 840
 aatacctttc actaattaga ggtgccagaa tttttatact cgctactcag gaattgggtca 900
 cttcaataat ctgaattact ataaccttgg tcctcttttc atgaacagct tgagccactg 960

acattctgtt gtctaggtga ttacgtgaag

990

<210> 142

<211> 195

<212> DNA

<213> Homo sapiens

<400> 142

cctaaatcct atcattttta caagtacaac taccctatct ccctcagaat gtagcattgc 60
ctctgggttg ctgtggatcc tgtattggac cactcagctg tagagtcctg tgggatccaa 120
gcttcaagga gacccatcat gcatgttttag ggccagttcc aggtgtcctt gacatgacac 180
taaacctcca tttcc 195

<210> 143

<211> 57

<212> PRT

<213> Homo sapiens

<400> 143

Met Asn Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr
1 5 10 15
Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Asn
20 25 30
Gln Ile Phe Leu Arg Ser Glu Glu Glu Thr Val Thr Pro Tyr Tyr Thr
35 40 45
Leu Gly Ser Gln Met Cys Asn Leu Ile
50 55

<210> 144

<211> 57

<212> PRT

<213> Homo sapiens

<400> 144

Met Asn Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr
1 5 10 15
Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Asn
20 25 30
Gln Ile Phe Leu Arg Ser Glu Glu Glu Thr Val Thr Pro Tyr Tyr Thr
35 40 45

Val Gly Gln Asp Gly Ile Glu Leu Leu Thr Ser Asp Leu Pro Ala Ser
 50 55 60

Ala Ser Gln Ser Ala Gly Ile Ile Gly Met Ser His Arg Ala Arg Pro
 65 70 75 80

Arg Trp Cys Val Phe
 85

<210> 148
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 148
 Met Pro Lys Leu Leu Pro Gly Phe Gln Gly Asn Arg Ala Arg Trp Leu
 1 5 10 15

Asn Gln Arg Ser Asp Ser Gln Ala Ala Arg Glu Lys Val Phe Asn Pro
 20 25 30

Leu Ile Pro Val Cys Asn Arg Arg Asn Gln Gly Leu His Thr Leu
 35 40 45

<210> 149
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 149
 Met Leu Val Gly Arg Lys Arg Arg Arg Glu Ser Ser Val Lys Glu Asn
 1 5 10 15

Thr Gly Met Glu Thr Leu Gln Arg Leu Arg Gln Lys His Pro Met Gly
 20 25 30

Lys Ser Arg Arg Thr Ile Ser Cys Leu Trp Arg Thr Gly Ser Arg Glu
 35 40 45

Gln Ser Thr Ser Pro Asp Thr Ser Leu Gly Ser Thr Thr Pro Ser Ser
 50 55 60

His Thr Leu Glu Leu Val Ala Leu Asp Ser Glu Val Leu Arg Asp Ser
 65 70 75 80

Leu Gln Cys Gln Asp His Leu Ser Pro Gly Val Ser Ser Leu Cys Asp
85 90 95

Asp Asp Pro Gly Ser Asn Lys Pro Leu Ser Ser Asn Leu Arg Arg Leu
100 105 110

Leu Glu Ala Gly Ser Leu Lys Leu Asp Ala Ala Ala Thr Ala Asn Gly
115 120 125

Arg Val Glu Ser Pro Val Asn Val Gly Ser Lys Pro Leu Leu Phe Pro
130 135 140

Ala Phe Pro Pro Arg Pro Ala Ala Gln Cys Ser Gly Gln Glu Val Gly
145 150 155 160

Arg Glu Ala Gly Thr Glu
165

<210> 150

<211> 352

<212> PRT

<213> Homo sapiens

<400> 150

Pro Arg Asp Val Ser Arg Gln Glu Glu Ala Glu Gly Glu Leu Ser Glu
1 5 10 15

Gly Glu His Trp Tyr Gly Asn Ser Ser Glu Thr Pro Ser Glu Ala Ser
20 25 30

Tyr Gly Glu Val Gln Glu Asn Tyr Lys Leu Ser Leu Glu Asp Arg Ile
35 40 45

Gln Glu Gln Ser Thr Ser Pro Asp Thr Ser Leu Gly Ser Thr Thr Pro
50 55 60

Ser Ser His Thr Leu Glu Leu Val Ala Leu Asp Ser Glu Val Leu Arg
65 70 75 80

Asp Ser Leu Gln Cys Gln Asp His Leu Ser Pro Gly Val Ser Ser Leu
85 90 95

Cys Asp Asp Asp Pro Gly Ser Asn Lys Pro Leu Ser Ser Asn Leu Arg
100 105 110

Arg Leu Leu Glu Ala Gly Ser Leu Lys Leu Asp Ala Ala Ala Thr Ala
115 120 125

Asn	Gly	Arg	Val	Glu	Ser	Pro	Val	Asn	Val	Gly	Ser	Asn	Leu	Ser	Phe
130			135			140									
Ser	Pro	Pro	Ser	His	His	Ala	Gln	Gln	Leu	Ser	Val	Leu	Ala	Arg	Lys
145			150			155						160			
Leu	Ala	Glu	Lys	Gln	Glu	Gln	Asn	Asp	Gln	Tyr	Thr	Pro	Ser	Asn	Arg
			165			170						175			
Phe	Ile	Trp	Asn	Gln	Gly	Lys	Trp	Leu	Pro	Asn	Ser	Thr	Thr	Thr	Cys
			180			185						190			
Ser	Leu	Ser	Pro	Asp	Ser	Ala	Ile	Leu	Lys	Leu	Lys	Ala	Ala	Ala	Asn
195			200			205									
Ala	Val	Leu	Gln	Asp	Lys	Ser	Leu	Thr	Arg	Thr	Glu	Glu	Thr	Met	Arg
210			215			220									
Phe	Glu	Ser	Phe	Ser	Ser	Pro	Phe	Ser	Ser	Gln	Ser	Ala	Ser	Ser	Thr
225			230			235						240			
Leu	Ala	Ala	Leu	Ser	Lys	Lys	Val	Ser	Glu	Arg	Ser	Leu	Thr	Pro	Gly
			245			250						255			
Gln	Glu	His	Pro	Pro	Pro	Ala	Ser	Ser	Phe	Leu	Ser	Leu	Ala	Ser	Met
			260			265						270			
Thr	Ser	Ser	Ala	Ala	Leu	Leu	Lys	Glu	Val	Ala	Ala	Arg	Ala	Ala	Gly
275			280			285									
Ser	Leu	Leu	Ala	Glu	Lys	Ser	Ser	Leu	Leu	Pro	Glu	Asp	Pro	Leu	Pro
290			295			300									
Pro	Pro	Pro	Ser	Glu	Lys	Lys	Pro	Glu	Lys	Val	Thr	Pro	Pro	Pro	Pro
305			310			315						320			
Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Gln	Ser	Leu	Glu	Leu
			325			330						335			
Leu	Leu	Leu	Pro	Val	Pro	Lys	Gly	Arg	Val	Ser	Lys	Pro	Ser	Asn	Ser
			340			345						350			

<210> 151

<211> 67
 <212> PRT
 <213> Homo sapiens

<400> 151
 Met Gly Tyr Gln Trp Tyr Arg Leu Arg Val Asn Ser Ile Ser Gly Phe
 1 5 10 15
 His Gly Ser Leu Glu Gln His Leu Pro Val Ser Ser Ala Phe His Gln
 20 25 30
 Arg Trp Asp Leu Trp Ser Thr Gly Cys Leu Thr Pro Gly Ala Ile Glu
 35 40 45
 Lys Gly Glu Asp Leu Trp Lys Ala Phe Val Leu Ala Pro Val His Leu
 50 55 60
 Val Leu Asn
 65

<210> 152
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 152
 Met Lys Glu Gly Val Leu Gly Ser Val Phe Arg Pro Lys Cys Pro Gln
 1 5 10 15
 Gly Pro Ser Gly Cys Leu Tyr Leu Leu Met Ser Pro His Thr Cys Trp
 20 25 30
 Gln Ser Trp Asp Lys Ser Leu Thr Leu Cys Val Thr Ser Asp Ser Pro
 35 40 45
 Trp Lys Lys Glu
 50

<210> 153
 <211> 63
 <212> PRT
 <213> Homo sapiens

<400> 153
 Met Arg Thr Glu Ile Ser Trp Ser Val His Glu Glu Glu Trp Ile Gln
 1 5 10 15

Asp Thr His Arg Arg Ile Asn Gly Ser Gly Lys Val Pro Gly Leu Met
 20 25 30

His Glu Glu Asp Leu Val Arg Leu Glu Thr Cys Leu Ala Ser Gln Gly
 35 40 45

Ser Ala Val Ser Tyr Pro Cys Ala Lys
 50 55

<210> 156
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 156
 Asp Thr Glu Ser Gly Trp Asp Asp Thr Ala Val Val Asn Asp Leu Ser
 1 5 10 15

Ser Thr Ser Ser Gly Thr Glu Ser Gly Pro Gln Ser Pro Leu Thr Pro
 20 25 30

Asp Gly Lys Arg Asn Pro Lys Gly Ile Lys Lys Ser Trp Gly Lys Ile
 35 40 45

Arg Arg Thr Gln Ser Gly Asn Phe Tyr Thr Asp Thr Leu Gly Met Ala
 50 55 60

Glu Phe Arg Arg Gly Gly Leu Arg Ala Thr Ala Gly Pro Gly Leu Ser
 65 70 75 80

Arg Thr Arg Asp Phe Lys Gly Gln Lys
 85

<210> 157
 <211> 65
 <212> PRT
 <213> Homo sapiens

<400> 157
 Met Ser His Ser Pro Val Leu Pro Ala Pro Gln Ser Ser Val Gly Tyr
 1 5 10 15

Pro Val Arg Pro Ser Pro Cys Thr Pro Phe Phe Ser Leu Ile Glu Ile
 20 25 30

Pro Ala Thr Cys Cys Leu Leu Pro Cys Arg Ile Thr Asn Ala Cys Pro

45

His
65

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<210> 158
<211> 51
<212> PRT
<213> Homo sapiens
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<400> 158
Met Val Ala Arg Ile Lys Ser Glu Lys Pro Gly Asn Ser Lys Leu Leu
  1             5             10             15
Glu Ile Leu Val Ile Leu Thr Arg Arg Val Glu Val Lys Val Met Lys
      20             25             30
Cys Gly Lys Phe Trp Lys Pro Phe Glu Ser Lys Ala Glu Ser Ile Cys
      35             40             45
Cys Tyr Ile
      50

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<210> 159
<211> 116
<212> PRT
<213> Homo sapiens
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<220>
<221> UNSURE
<222> (33)

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<400> 159
Met Ala Gly Leu Leu Asn Val Thr Phe Ile Tyr Leu Leu Leu Glu Cys
  1                      5                      10                      15
Leu Ser Leu Tyr Thr His Val Thr Cys Ser Ser Leu Pro Ser Ser Leu
      20                      25                      30
Xaa Leu Tyr Ile Tyr Tyr Tyr His Arg Gly Leu Gly Lys Lys Thr Pro
      35                      40                      45
Thr Ala Ala Pro His Thr His Pro Pro Ala Leu Tyr His Leu Leu Gly

```


<400> 161

Met His Thr Gln Val His Met Phe Thr Glu Ser Gln Val Gln Glu Arg
1 5 10 15

Ser Lys Glu Pro Lys Leu Glu Ala Thr His Met Phe Ile Asn Ser Arg
20 25 30

Asp Asp Lys Ile Tyr Leu Asp
35

<210> 162

<211> 40

<212> PRT

<213> Homo sapiens

<400> 162

Met Phe Ala Ser Gly Pro Pro Cys His Val Lys Ser Thr Leu Tyr Ser
1 5 10 15

Leu Phe Leu Glu Arg Thr Tyr Tyr Val Asn Leu Asp Phe His Met Val
20 25 30

Ile Thr Leu Tyr Glu Ala Asn Ile
35 40

<210> 163

<211> 73

<212> PRT

<213> Homo sapiens

<400> 163

Met Gln Asn Ser Val Ser Thr Gln Arg Phe Asn Val Tyr Ser Phe Lys
1 5 10 15

Gln Ile Ser Phe Asp Ser Leu Glu Tyr Phe Phe Leu Asn Ile Leu Ser
20 25 30

Pro Ser Met Glu Ser Cys Pro Lys Lys Ala Glu Arg Lys Glu Lys Lys
35 40 45

Lys Arg Lys Leu Asn Phe Leu Asn Ser Ile Ser His Cys Leu Gly His
50 55 60

Val Cys Lys Trp Pro Thr Leu Pro Arg
65 70

Leu Val Trp Val Trp Phe Trp Leu Leu Asn Glu Gln Arg Gln Asn Glu
65 70 75 80

Gly Ala Met Ser Thr Asp Glu Ala Phe Gly Lys Arg Pro Pro Ser Ile
85 90 95

Ala Leu Leu Glu Gly Ser Val Glu Ala Ala Val Phe Pro Gly Ala Gly
100 105 110

His Leu Asp Thr Val Pro Ala Cys Thr Gln Pro Pro Ser Thr Leu Leu
115 120 125

His Gln Pro Ala
130

<210> 171

<211> 121

<212> PRT

<213> Homo sapiens

<400> 171

Met Val Ser Cys Asn Tyr Gly Tyr Val Arg Val Gln Arg Arg Glu Ser
1 5 10 15

Cys Val Gly Trp Ser Gly Leu Glu Arg Leu Gly Thr Glu Leu Gly Val
20 25 30

Glu Leu Gly Trp Pro Ala Ala Glu Gly Ala Glu Met Gly Trp Gly Gly
35 40 45

Pro Ser Ser Gln Pro Pro Gly Thr Phe Pro Glu Gly Pro Ala Val Gly
50 55 60

Leu Cys Thr Arg Glu Ile Ala Ser Leu Phe Arg Thr Pro Ser Leu Pro
65 70 75 80

Ala Leu His Leu Pro Thr Gly Ala Leu Glu Gln Ala Arg Leu Gln Leu
85 90 95

Arg His Val Gln Pro Gln Thr Phe Ala Pro Ala Ser Pro Pro Arg Leu
100 105 110

Pro Arg Glu Leu Gly Lys Gly Leu Cys
115 120

<210> 172

Phe Asn Ser Pro Cys Phe Pro Pro Val Pro Tyr Arg Pro Ser Leu Ser
85 90 95

Pro Gly Val Ser Ile Glu Asn Ser Ala Tyr Leu
100 105

<210> 174
<211> 65
<212> PRT
<213> Homo sapiens

<400> 174
Met Val Trp Trp Ser Leu Gly Leu Thr Leu Thr Arg Glu Arg Asn Ala
1 5 10 15

Asp Phe Ser Phe Thr Ile Pro Ser Gly Leu His Arg Tyr Pro Ser Lys
20 25 30

Val Arg Arg Asp Phe Cys Cys Tyr Leu Ser Ser Cys Phe Ser Ala Glu
35 40 45

Ala Leu Thr Lys Ile Gln Ile Asn Ile Ser Gln Met Gly Ile Val Leu
50 55 60

Ile
65

<210> 175
<211> 65
<212> PRT
<213> Homo sapiens

<400> 175
Met Val Trp Trp Ser Leu Gly Leu Thr Leu Thr Arg Glu Arg Asn Ala
1 5 10 15

Asp Phe Ser Phe Thr Ile Pro Ser Gly Leu His Arg Tyr Pro Ser Lys
20 25 30

Val Arg Arg Asp Phe Cys Cys Tyr Leu Ser Ser Cys Phe Ser Ala Glu
35 40 45

Ala Leu Thr Lys Ile Gln Ile Asn Ile Ser Gln Met Gly Ile Val Leu
50 55 60

Ile

Gly Leu Thr Ser Thr Pro Phe Ile Asn Asn Ala Ala Pro Thr Ser Thr
85 90 95

His Val Trp Ile Ser Thr His Leu Ser Ser Phe Leu Arg Ile Asp Phe
100 105 110

Lys Met

<210> 178

<211> 47

<212> PRT

<213> Homo sapiens

<400> 178

Met Glu Leu Pro Phe Cys Lys Gln Phe Ile Ser Asp Asp Ile Thr Thr
1 5 10 15

Phe Leu Tyr Val Ser Leu Tyr Ile His Leu Ile Val Leu Leu Lys Trp
20 25 30

Phe Leu Lys Cys Ile His Arg Tyr Phe Gly Tyr Leu Gly Arg Gly
35 40 45

<210> 179

<211> 42

<212> PRT

<213> Homo sapiens

<400> 179

Met Asn Leu Leu Ile Leu Ser Leu Ser Asn Tyr Pro Lys Asn Gln Phe
1 5 10 15

Val Phe Leu Val Ile Ala Gly Asn Arg Gly Leu Cys Leu Ile Asn Gln
20 25 30

Lys Gly Ser Ser Leu Gly Ala Val Ile Tyr
35 40

$\langle 210 \rangle$ 180

<211> 24

<212> PRT

<213> Homo sapiens

<400> 183

Asn Glu Tyr Lys Ala Glu Ile Ala Glu Val Glu Arg Gln Ile Leu Gln
1 5 10 15

Gly Glu Gln Ser Tyr Ser Ser Ala Leu Glu Gly Met Lys Met Glu Ile
20 25 30

Ser His Leu Thr Gln Glu Leu His Gln Arg Asp Ile Thr Ile Ala Ser
35 40 45

Thr Lys Gly Ser Ser Ser Asp Met Glu Lys Arg Leu Arg Ala Glu Met
50 55 60

Gln Lys Ala Glu Asp Lys Ala Val Glu His Lys Glu Ile Leu Asp Gln
65 70 75 80

Leu Glu Ser Leu Lys Leu Glu Asn Arg His Leu Ser Glu Met Val Met
85 90 95

Lys Leu Glu Leu Gly Leu His Glu Arg Trp Gly Phe Thr Met Leu Ser
100 105 110

Ser Leu Val Leu Asn Phe Gly Ile Gln Ala Ile Arg Gln Pro Gln Arg
115 120 125

Pro Lys Val Leu Glu Leu Gln Val
130 135

<210> 184

<211> 47

<212> PRT

<213> Homo sapiens

<400> 184

Met Cys Asn Trp Arg Phe Ser Xaa Arg Gly Glu Arg Lys Trp Asp Ile
1 5 10 15

Lys Asn Asn Trp Lys Lys Ile Ala Glu Ile Val Leu Lys Leu Thr Asn
20 25 30

His Thr Lys Pro Gln Asn Pro Glu Ala Leu Gly His Gln Ala Gly
35 40 45

<210> 185

<211> 30

<212> PRT

<213> Homo sapiens

<400> 185

Met Tyr His Phe Tyr Asn Lys Glu Phe Ile Asn Arg Asn Lys His Ile
1 5 10 15

Leu Leu Leu Ala Ser Ala Ala His Ile Leu Glu Ile Ser Thr
20 25 30

<210> 186

<211> 86

<212> PRT

<213> Homo sapiens

<400> 186

Ala His Cys Ser Phe Lys Leu Gln Ser Ala Ser Asn Leu Pro Thr Ser
1 5 10 15

Ala Ser Gln Val Ala Gly Thr Thr Gly Arg Arg His Gln Ala Arg Pro
20 25 30

Ile Phe Val Phe Phe Val Glu Thr Arg Phe Arg His Ile Ala Gln Ala
35 40 45

Gly Leu Glu Leu Leu Ser Ser Ser Asp Pro Thr Thr Ser Ser Ser Gln
50 55 60

Ser Ala Gly Ile Ile Gly Val Thr Ala Ala Ala Gly Ser Gln Ala Val
65 70 75 80

Leu Phe Cys Ile Ile Arg
85

<210> 187

<211> 40

<212> PRT

<213> Homo sapiens

<400> 187

Met Phe Ser Lys Pro Gly Tyr Ser Gln Ser Leu Trp Leu Leu Leu Met
1 5 10 15

Ser Phe Ala Gly Glu Ser His Glu Thr Val Leu Ile Cys Ala Tyr Ser
20 25 30

Pro Gln Cys Tyr Leu Ser Ala Leu

<210> 188
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 188
 Met Arg Ile Ile Ser Thr Phe Cys Ser Tyr Gly Lys Asp Leu Lys Ala
 1 5 10 15
 Asp Ala Cys Ala Arg Asp Met Val Asp Thr Thr Tyr Ile Ala Val Met
 20 25 30
 Ile Leu Leu Tyr Tyr Ser Val Leu Tyr Leu Leu Leu His Thr Leu Pro
 35 40 45
 Leu Pro Ile Met Thr Lys Ile Ile Thr Ala Tyr
 50 55

<210> 189
 <211> 35
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (8)..(15)

<400> 189
 Met Arg Pro Phe Pro Val Val Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val
 1 5 10 15
 Phe Thr Ser Gly Glu Ala Ala Val Leu Leu Cys Leu Phe Leu Leu Cys
 20 25 30
 Trp Xaa Val
 35

<210> 190
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 190

Met Val Leu Lys Val Asn Ser Arg Met Val Ala Trp Val Phe Lys Val
 1 5 10 15

Trp Phe Leu Leu Asn Ala Ser Gly Phe Leu Thr Asn Ile Lys Ser Lys
 20 25 30

Lys Lys Lys Lys Asn Leu Leu Val Ala Ile Arg Arg Leu Gln
 35 40 45

<210> 191

<211> 96

<212> PRT

<213> Homo sapiens

<400> 191

Met Ser Ser Pro Gln Phe Ser Leu Arg Val Phe Ala Phe Ser Leu Leu
 1 5 10 15

Thr Ser Thr Pro Leu Met Ser Leu Pro Ile Ala Pro Asn Ser Gly Ser
 20 25 30

Gln His Trp Tyr Ile Gln Val Trp Gln Arg Ala Ser Ser Thr Pro Gly
 35 40 45

Met Ala Ser Pro Lys Gln Gln Glu Glu Val Gly Glu Val Leu Phe Pro
 50 55 60

Ser Thr Ala Val Ala Leu Trp Trp Lys Val Arg Phe Pro Asn Gln Leu
 65 70 75 80

Arg Arg Val Gln Gln Ala Thr Arg Gln Val Asn Pro Phe Thr Ser Gly
 85 90 95

<210> 192

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (24)

<400> 192

Met Leu Phe Met Trp Lys Val Lys Phe Cys Phe Ile Met Glu Phe Cys
 1 5 10 15
 Phe Leu Tyr Asn Ser Phe Arg Xaa Ser Tyr Phe Ala Thr Ile Leu Tyr
 20 25 30
 Lys Ala Leu Arg Gln Val Met Val Ile Ile Leu Met Gln Asn His Leu
 35 40 45
 Gly Ser Gln Ser Leu Ala
 50

<210> 193
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 193
 Met Tyr Pro Leu Val His Gly Arg Pro Ser Ser Ile Ser Arg Gly Gln
 1 5 10 15
 Val His Leu Val Arg Ala Gln Lys Leu His Ser Gln Thr Asn Glu Ser
 20 25 30
 Ser Gln Asn Ile Phe Leu Arg Leu Trp Val Tyr Leu Tyr Arg Asn His
 35 40 45
 Trp Met Leu Leu Ser Leu Phe Ser Phe
 50 55

<210> 194
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 194
 Met Tyr Pro Leu Val His Gly Arg Pro Ser Ser Ile Ser Arg Gly Gln
 1 5 10 15
 Val His Leu Val Arg Ala Gln Lys Leu His Ser Gln Thr Asn Glu Ser
 20 25 30
 Ser Gln Asn Ile Phe Leu Arg Leu Trp Val Tyr Leu Tyr Arg Asn His
 35 40 45
 Trp Met Leu Leu Ser Leu Phe Ser Phe

<210> 195

<211> 91

<212> PRT

<213> Homo sapiens

<400> 195

Met Gly Lys Glu Ala Ile Leu Ile Gly Pro Arg Glu His Val Gly Leu
 1 5 10 15

Cys Leu Val Leu Val Thr Gly Ile Leu Tyr Thr Phe Ile Val Gly Glu
 20 25 30

Lys Ala Ala Ile Thr Ser Ala Met Lys Val Leu Leu Ile His Gly Leu
 35 40 45

Asn Ile Ile Glu Met Leu Leu Val Leu Cys Arg Ala Asp Ser Ser Arg
 50 55 60

Thr Lys Glu Trp Gln Ser Asp Glu Leu Arg His Ile Arg Asp Pro Thr
 65 70 75 80

Val Gln Met Met Thr Gln Asn Leu Phe Leu Leu
 85 90

<210> 196

<211> 79

<212> PRT

<213> Homo sapiens

<400> 196

Met Arg Thr Ala Gln Gln Cys Ile Gln Arg His Glu His Leu Ala Ala
 1 5 10 15

Leu Glu Ser Gly Pro His Lys Phe Gly Gly Ile Gln Ala Leu Pro Lys
 20 25 30

Arg Ala Gly Gly Cys Ser Phe Leu Leu His Phe Leu Ser Gln Arg Pro
 35 40 45

Arg Glu Leu Ser Pro Gln Thr Lys Gly Lys Gly Arg Leu Gln Ser Ser
 50 55 60

Leu Tyr Leu Ala Leu Asn Ala Ser Ser Leu Cys Gly Pro Ala Arg
 65 70 75

<210> 197
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 197
 Met Thr Asp Ile Glu Trp Asp Cys Ser Arg Gln Met Gly Met Asn Gly
 1 5 10 15
 His Pro Thr Cys Lys Asp Thr Met Gly Ser Ala Asp Glu Met Gly Pro
 20 25 30
 Val Thr Glu Lys Leu Leu Pro Pro
 35 40

<210> 198
 <211> 40
 <212> PRT
 <213> Homo sapiens
 <400> 198
 Met Thr Asp Ile Glu Trp Asp Cys Ser Arg Gln Met Gly Met Asn Gly
 1 5 10 15
 His Pro Thr Cys Lys Asp Thr Met Gly Ser Ala Asp Glu Met Gly Pro
 20 25 30
 Val Thr Glu Lys Leu Leu Pro Pro
 35 40

<210> 199
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 199
 Met Thr Leu Leu Leu Arg Arg Pro Glu Leu Trp Cys Cys Gly Met Thr
 1 5 10 15
 Val Cys Leu Leu Thr Ser Ala Ser Ser His Ser Pro Pro Arg Ser Pro
 20 25 30
 Cys Pro Thr Pro Gly Val Ser Arg Gly Arg Gln Val Thr Thr Met Leu
 35 40 45

Leu	Ser	Asp	Ile	Lys	Ala	Leu	Ile	Arg	Lys	His	Glu	Ala	Phe	Glu	Ser
65					70					75					80
Asp	Leu	Pro	Glu	His	Gln	Asp	Arg	Ala	Glu	Gln	Ile	Ala	Ala	Ile	Ala
				85					90					95	
Gln	Glu	Leu	Asn	Glu	Leu	Asp	Tyr	Tyr	Asp	Ser	His	Asn	Val	Asn	Thr
			100					105					110		
Arg	Cys	Gln	Lys	Ile	Cys	Asp	Gln	Trp	Asp	Ala	Leu	Gly	Ser	Leu	Thr
		115					120					125			
His	Ser	Arg	Arg	Glu	Ala	Leu	Glu	Lys	Thr	Glu	Lys	Gln	Leu	Glu	Ala
	130					135					140				
Ile	Asp	Gln	Leu	His	Leu	Glu	Tyr	Ala	Lys	Arg	Ala	Ala	Pro	Phe	Asn
145					150					155					160
Asn	Trp	Met	Glu	Ser	Ala	Met	Glu	Asp	Leu	Gln	Asp	Met	Phe	Ile	Val
				165					170					175	
His	Thr	Ile	Glu	Glu	Ile	Glu	Gly	Leu	Ile	Ser	Ala	His	Asp	Gln	Phe
			180					185					190		
Lys	Ser	Thr	Leu	Pro	Asp	Ala	Asp	Arg	Glu	Arg	Glu	Ala	Ile	Leu	Ala
		195					200					205			
Ile	His	Lys	Glu	Ala	Gln	Arg	Ile	Ala	Glu	Ser	Asn	His	Ile	Lys	Leu
	210					215					220				
Ser	Gly	Ser	Asn	Pro	Tyr	Thr	Thr	Val	Thr	Pro	Gln	Ile	Ile	Asn	Ser
225					230					235					240
Lys	Trp	Glu	Lys	Val	Gln	Gln	Leu	Val	Pro	Lys	Arg	Asp	His	Ala	Leu
				245					250					255	
Leu	Glu	Glu	Gln	Ser	Lys	Gln	Gln	Ser	Asn	Glu	His	Leu	Arg	Arg	Gln
			260					265					270		
Phe	Ala	Ser	Gln	Ala	Asn	Val	Val	Gly	Pro	Trp	Ile	Gln	Thr	Lys	Met
		275						280				285			
Glu	Glu	Ile	Gly	Arg	Ile	Ser	Ile	Glu	Met	Asn	Gly	Thr	Leu	Glu	Asp
	290					295					300				
Gln	Leu	Ser	His	Leu	Lys	Gln	Tyr	Glu	Arg	Ser	Ile	Val	Asp	Tyr	Lys
305					310					315					320

Pro Asn Leu Asp Leu Leu Glu Gln Gln His Gln Leu Ile Gln Glu Ala
325 330 335

Leu Ile Phe Asp Asn Lys His Thr Asn Tyr Thr Met Glu His Ile Arg
340 345 350

Val Gly Trp Glu Gln Leu Leu Thr Thr Ile Ala Arg Thr Ile Asn Glu
355 360 365

Val Glu Asn Gln Ile Leu Thr Arg Asp Ala Lys Gly Ile Ser Gln Glu
370 375 380

Gln Met Gln Glu Phe Arg Ala Ser Phe Asn His Phe Asp Lys Lys Gln
385 390 395 400

Thr Gly Ser Met Asp Ser Asp Asp Phe Arg Ala Leu Leu Ile Ser Thr
405 410 415

Gly Tyr Ser Leu Gly Glu Ala Glu Phe Asn Arg Ile Met Ser Leu Val
420 425 430

Asp Pro Asn His Ser Gly Leu Val Thr Phe Gln Ala Phe Ile Asp Phe
435 440 445

Met Ser Arg Glu Thr Thr Asp Thr Asp Thr Ala Asp Gln Val Ile Ala
450 455 460

Ser Phe Lys Val Leu Ala Gly Asp Lys Asn Phe Ile Thr Ala Glu Glu
465 470 475 480

Leu Arg Arg Glu Leu Pro Pro Asp Gln Ala Glu Tyr Cys Ile Ala Arg
485 490 495

Met Ala Pro Tyr Gln Gly Pro Asp Ala Val Pro Gly Ala Leu Asp Tyr
500 505 510

Lys Ser Phe Ser Thr Ala Leu Tyr Gly Glu Ser Asp Leu
515 520 525

<210> 202

<211> 83

<212> PRT

<213> Homo sapiens

<400> 202

Met Trp Pro Gly Val Gly Gln Lys Asn Leu His Lys Asp Arg Ile Leu
1 5 10 15

Phe Ser Glu Ala Lys Asn Ser Arg Gly Ala Thr Ile Arg Phe Phe Ser
 20 25 30

Ala Val Gln Leu Gln Glu Met Leu Gly Ile Ser Tyr Asn Ser His Leu
 35 40 45

Ser Lys Thr Tyr Pro Gly Arg Cys Ser Ala Phe Ser His Leu Gly Ala
 50 55 60

Glu Gln Pro Tyr Ile Ala Val Tyr Ile Leu Thr Tyr Phe Pro Asp Phe
 65 70 75 80

Leu Gly Gly

<210> 203
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 203
 Met Trp Pro Gly Val Gly Gln Lys Asn Leu His Lys Asp Arg Ile Leu
 1 5 10 15

Phe Ser Glu Ala Lys Asn Ser Arg Gly Ala Thr Ile Arg Phe Phe Ser
 20 25 30

Ala Val Gln Leu Gln Glu Met Leu Gly Ile Ser Tyr Asn Ser His Leu
 35 40 45

Ser Lys Thr Tyr Pro Gly Arg Cys Ser Ala Phe Ser His Leu Gly Ala
 50 55 60

Glu Gln Pro Tyr Ile Ala Val Tyr Ile Leu Thr Tyr Phe Pro Asp Phe
 65 70 75 80

Leu Gly Gly

<210> 204
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 204

65

70

75

<210> 207

<211> 78

<212> PRT

<213> Homo sapiens

<400> 207

Met Ser Ser Asn Leu Cys Ser Trp Lys Pro Ser Tyr Gly Arg Val Phe
 1 5 10 15

Pro Pro Ser Ser Ser Ala Phe Tyr Gln Arg Pro Tyr Ser Pro Pro Leu
 20 25 30

Leu Gln Phe Gln Thr Ser Phe Leu Phe His Gln Lys His Ser Pro Ser
 35 40 45

Ser Leu Val Ser Tyr Ser Phe His Thr Gln Lys Gln Asn Ile Phe Lys
 50 55 60

Thr Phe Pro Lys Lys Glu Glu Lys Gly Asn Ser Lys Val His
 65 70 75

<210> 208

<211> 15

<212> PRT

<213> Homo sapiens

<400> 208

Met Phe Ile Glu Leu Phe Trp Leu Ile Ile Ser Thr Asp Cys Leu
 1 5 10 15

<210> 209

<211> 47

<212> PRT

<213> Homo sapiens

<400> 209

Met Glu Arg His Thr Gln Ala Leu Cys Gly Arg Val Leu Ser Gly His
 1 5 10 15

Ser Glu Phe Arg Pro Gly Leu Trp Thr Asn Pro Asn Phe Ala Ser Ala
 20 25 30

Phe Val Ser Leu Val Lys Pro Val Phe Val Phe Ser Leu Leu Phe

35

40

45

<210> 210

<211> 77

<212> PRT

<213> Homo sapiens

<400> 210

Met Ser Ser Leu Leu Leu Lys Glu Thr Phe Lys Gln Phe Ser Ser Leu
 1 5 10 15

His Cys His Leu Ala His Thr Ser Arg Ala Ala Gln His Leu Gln Gly
 20 25 30

Leu Ser Phe Trp Ala Val Leu Arg Asp Ala Ala Gly Gly Ser Leu Ala
 35 40 45

Phe Leu Gly Leu Leu Ser Gln Phe Pro Pro Val Leu Leu Ser Gly Cys
 50 55 60

Pro Ala Phe Gly Cys Trp Ile Leu Gln Val Pro Gln Arg
 65 70 75

<210> 211

<211> 78

<212> PRT

<213> Homo sapiens

<400> 211

Met Gly Glu Pro Gly His Glu Lys Glu Leu Pro Ser Asp Ser Asn Ile
 1 5 10 15

Ser Leu Tyr Leu Phe Lys Val Cys Met Cys Gln Thr Val Pro Ser Thr
 20 25 30

Leu Tyr Thr Leu Ala Tyr Pro Val Leu Thr Asn Ile Ser Glu Met Gly
 35 40 45

Ile Thr Val Gln Phe Pro Asp Ile Val Ser Lys Ala Lys Pro Lys Pro
 50 55 60

Val Cys Thr Arg Ala Cys Ala Leu His Thr Asp Trp Leu Ile
 65 70 75

<210> 212

<211> 61
<212> PRT
<213> Homo sapiens

<400> 212

Met Ser Arg Leu Pro His Thr Pro Ala Leu Ser Phe Pro Ser Gln Gly
1 5 10 15

Asn Gly Ser Arg His Thr Pro His Leu Gly Gly Gln Ala Glu Phe Leu
20 25 30

Ala Gln Gly Arg His Ser Glu Ser Val Glu Arg Lys Asn Asp Val Ala
35 40 45

Arg Thr Leu Leu Gln Val Ser Ile Gly Asn His Lys Pro
50 55 60

<210> 213
<211> 79
<212> PRT
<213> Homo sapiens

<400> 213

Met Lys Val Pro Gln Ser Pro Val Leu Gln Leu Leu Ala Gln Asp Leu
1 5 10 15

Ser Ser Arg Glu Lys Arg Ile Asn Thr Thr Pro Lys Gly Glu Lys Leu
20 25 30

Leu Leu Ser Ser Ser Gly Asp Leu Ala His Gly Gly Pro Asn Gly Gly
35 40 45

Pro Ser Leu Ile Ser Asn Ser Pro Ala Asn Ser Pro Leu Asp Thr Arg
50 55 60

Ala Gly Lys Thr Leu Pro Gln Gly Gln Glu Gly Met Phe Val Ser
65 70 75

<210> 214
<211> 40
<212> PRT
<213> Homo sapiens

<400> 214

Met Arg Asp Gly Pro Pro Phe Gly Pro Pro Trp Ala Lys Ser Pro Glu
1 5 10 15

Cys His Pro Asn His Leu Glu Ala Leu Val Leu Asp Ala Leu Gln Tyr
 20 25 30

Phe Phe Phe Leu Phe Phe Glu
 35

<210> 218
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 218
 Met Asn Asp Arg Ala Arg Leu Ser Leu Ser Gln Lys Lys Thr Glu Arg
 1 5 10 15

Glu Ser Leu Glu Thr Arg His Ser
 20

<210> 219
 <211> 84
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (28)..(79)

<400> 219
 Met Asp Arg Ala Leu Pro Leu Trp Gly Ser Gln Glu Pro Ser Glu Pro
 1 5 10 15

Ser Gln Ile Ala Leu Val Ser Ile Leu Val Leu Xaa Xaa Xaa Xaa Xaa
 20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser
 65 70 75 80

Ile Lys Ile Gln

<210> 220
 <211> 32
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (31)

<400> 220
 Met Lys Ile Thr Ser Cys Val Tyr Thr Ile Cys Leu His Leu Ala Asn
 1 5 10 15
 Thr Gly Leu His Asp Ser Thr Phe Ala Asn Tyr Leu Trp Leu Xaa Asn
 20 25 30

<210> 221
 <211> 786
 <212> PRT
 <213> Homo sapiens

<400> 221
 Arg Pro Leu Arg Ser Leu Lys Val Ile Tyr Asp Gly Leu Met Ala Leu
 1 5 10 15
 Phe Thr Thr Ser Leu Ile Ala Leu Leu Ser Ser Arg Gly Lys Asn Val
 20 25 30
 Ala Ile Glu Tyr Ile Lys Ile His Thr Ile Glu Lys Glu Asp Val His
 35 40 45
 Phe Cys Lys Gln Lys Ile Thr Asn Arg Met Leu Lys Leu Lys Leu Asp
 50 55 60
 Tyr Glu Glu Ser Pro Val Tyr Gln Val Tyr Val Gln Ala Lys Asp Leu
 65 70 75 80
 Gly Pro Asn Ala Val Pro Ala His Cys Lys Val Ile Val Arg Val Leu
 85 90 95
 Asp Ala Asn Asp Asn Ala Pro Glu Ile Ser Phe Ser Thr Val Lys Glu
 100 105 110

Arg Gly Asn Glu Met Asn Leu Phe Arg Met Asp Trp Arg Thr Gly Glu
370 375 380

Leu Arg Thr Ala Arg Arg Val Pro Ala Lys Arg Asp Pro Gln Arg Pro
385 390 395 400

Tyr Glu Leu Val Ile Glu Val Arg Asp His Gly Gln Pro Pro Leu Ser
405 410 415

Ser Thr Ala Thr Leu Val Val Gln Leu Val Asp Gly Ala Val Glu Pro
420 425 430

Gln Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Glu His Gln Arg
435 440 445

Pro Ser Arg Ser Gly Gly Gly Glu Thr Ser Leu Asp Leu Thr Leu Ile
450 455 460

Leu Ile Ile Ala Leu Gly Ser Val Ser Phe Ile Phe Leu Leu Ala Met
465 470 475 480

Ile Val Leu Ala Val Arg Cys Gln Lys Glu Lys Lys Leu Asn Ile Tyr
485 490 495

Thr Cys Leu Ala Ser Asp Cys Cys Leu Cys Cys Cys Cys Cys Gly Gly
500 505 510

Gly Gly Ser Thr Cys Cys Gly Arg Gln Ala Arg Ala Arg Lys Lys Lys
515 520 525

Leu Ser Lys Ser Asp Ile Met Leu Val Gln Ser Ser Asn Val Pro Ser
530 535 540

Asn Pro Ala Gln Val Pro Ile Glu Glu Ser Gly Gly Phe Gly Ser His
545 550 555 560

His His Asn Gln Asn Tyr Cys Tyr Gln Val Cys Leu Thr Pro Glu Ser
565 570 575

Ala Lys Thr Asp Leu Met Phe Leu Lys Pro Cys Ser Pro Ser Arg Ser
580 585 590

Thr Asp Thr Glu His Asn Pro Cys Gly Ala Ile Val Thr Gly Tyr Thr
595 600 605

Asp Gln Gln Pro Asp Ile Ile Ser Asn Gly Ser Ile Leu Ser Asn Glu
610 615 620

Thr Lys His Gln Arg Ala Glu Leu Ser Tyr Leu Val Asp Arg Pro Arg
625 630 635 640

Arg Val Asn Ser Ser Ala Phe Gln Glu Ala Asp Ile Val Ser Ser Lys
645 650 655

Asp Ser Gly His Gly Asp Ser Glu Gln Gly Asp Ser Asp His Asp Ala
660 665 670

Thr Asn Arg Ala Gln Ser Ala Gly Met Asp Leu Phe Ser Asn Cys Thr
675 680 685

Glu Glu Cys Lys Ala Leu Gly His Ser Asp Arg Cys Trp Met Pro Ser
690 695 700

Phe Val Pro Ser Asp Gly Arg Gln Ala Ala Asp Tyr Arg Ser Asn Leu
705 710 715 720

His Val Pro Gly Met Asp Ser Val Pro Asp Thr Glu Val Phe Glu Thr
725 730 735

Pro Glu Ala Gln Pro Gly Ala Glu Arg Ser Phe Ser Thr Phe Gly Lys
740 745 750

Glu Lys Ala Leu His Ser Thr Leu Glu Arg Lys Glu Leu Asp Gly Leu
755 760 765

Leu Thr Asn Thr Arg Ala Pro Tyr Lys Pro Pro Tyr Leu Ser Pro Tyr
770 775 780

Leu Thr
785

<210> 222

<211> 80

<212> PRT

<213> Homo sapiens

<400> 222

Met Tyr Lys Arg Arg Ser Cys Lys Ile Ala Pro Ile Glu Ser Glu Leu
1 5 10 15

Glu Asn Leu Glu Glu Cys Ala Leu Thr Asn Ala Pro Phe Ser Ser Lys
20 25 30

Ala His Phe Phe Phe Leu Gln Thr Lys Leu Leu Glu Gln Val Asp Tyr

35

40

45

Thr Phe Cys His Ser His Val Trp Lys Asn Lys Asn Gly His Lys Leu
50 55 60

Phe Ala Ala Pro Tyr Val Lys Ser Trp Ser Pro Leu Ala Gly Cys Gly
65 70 75 80

<210> 223

<211> 87

<212> PRT

<213> Homo sapiens

<400> 223

Met Ser His Pro Phe Leu Ala Ile Leu Gly Cys Trp Thr Ser Gln Leu
1 5 10 15

His Phe Leu Leu Ser Cys Leu Asn Phe Tyr Leu Ser Thr Glu Thr Leu
20 25 30

Leu Thr Thr Tyr Lys Arg Ala Gly Ile Ser Pro Leu Asp Pro Thr Ile
35 40 45

Pro Ser Ser Ser Leu Phe Leu Cys Ile Leu Leu Gln Gln Thr Ser Glu
50 55 60

Gly Phe Phe Leu Ser Pro Ile Ser Leu Pro Leu His Leu Gly Phe Cys
65 70 75 80

Leu Arg His Phe Asn Lys Thr
85

<210> 224

<211> 61

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (8)

<400> 224

Met Thr Gln Leu Ile Cys Thr Xaa Gln His Asp Gln Asn Gln Asn Val

<210> 227
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 227
 Met Pro Leu Trp Gln Arg Glu Phe Ser Asn Lys Thr Glu Leu Gly Arg
 1 5 10 15
 Arg Glu Trp Asn Tyr Leu Leu Ile Ser Tyr Cys Asp Ile Arg Tyr Cys
 20 25 30
 Tyr Ile His Leu Ser Leu Trp Tyr Leu Leu Asn Asn Trp
 35 40 45

<210> 228
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 228
 Met Gly Leu Asp Phe Pro Phe His Ala Glu Lys Lys Leu Ser Leu Arg
 1 5 10 15
 Glu Cys Ala Glu Gln Ser Gly Pro Arg Lys Ala Thr Thr Asn Ile Leu
 20 25 30
 His Ala Lys Lys Glu Ala Lys Glu Glu Val Glu Leu Tyr Pro Asn Met
 35 40 45
 Leu Ile Ile Gly Val Ile Leu Ala Glu Leu Val Arg Pro Pro Gly Gly
 50 55 60
 Gln Gly Ile
 65

<210> 229
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 229
 Lys Asn Lys Gln Lys Lys Lys Arg Lys Lys Arg Lys Lys Arg Lys Lys
 1 5 10 15

<212> PRT
<213> Homo sapiens

<400> 232

Met Ile Tyr Gly Ile Ile Gly Ile Phe Ile Phe Asn Thr Ile Tyr His
1 5 10 15

Phe Ser Gly Leu Thr Leu Ser Asp Leu Phe Gly Ile Phe Ser Leu Met
20 25 30

Thr Lys Phe Ile Asn Gln Trp
35

<210> 233

<211> 42

<212> PRT

<213> Homo sapiens

<400> 233

Met Phe His Arg Ile His Gly Gln Arg Ile Arg Gln Ala Phe Glu Met
1 5 10 15

Asn Arg Ile Ser Leu Thr Ser Pro Ser Phe Cys Gln Phe Val Leu Phe
20 25 30

Leu Ser His Ile His Gln Leu Ser Pro Ser
35 40

<210> 234

<211> 42

<212> PRT

<213> Homo sapiens

<400> 234

Met Phe His Arg Ile His Gly Gln Arg Ile Arg Gln Ala Phe Glu Met
1 5 10 15

Asn Arg Ile Ser Leu Thr Ser Pro Ser Phe Cys Gln Phe Val Leu Phe
20 25 30

Leu Ser His Ile His Gln Leu Ser Pro Ser
35 40

<210> 235

<211> 37

<212> PRT
<213> Homo sapiens

<400> 235

Met Leu Met Asn Val Lys Val Ala Lys Thr Gln Ala Leu Thr Ile Leu
1 5 10 15
Met Phe Leu Leu Phe Lys Thr Asp Leu Tyr Gly Gln Lys His Arg Asn
20 25 30
Gly Ser Ser Arg Phe
35

<210> 236
<211> 135
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (72)

<220>
<221> UNSURE
<222> (116)

<220>
<221> UNSURE
<222> (131)

<400> 236

Met Lys Pro Ser Leu Cys Pro Arg Ala Val Gln Ala Ala Ala Val Ala
1 5 10 15
Pro Thr Asn Ser Gln Glu Thr Tyr Ser Val Pro Gln Gly Arg Cys Arg
20 25 30
Trp Gln Pro Trp Pro Arg Pro Ala His Arg Lys Pro Thr Leu Cys Pro
35 40 45
Gly Ala Gly Ala Gly Gly Ser His Gly Pro Asp Gln Leu Thr Gly Asn
50 55 60
Leu Leu Cys Cys Pro Arg Gly Xaa Cys Arg Arg Gln Pro Trp Pro Arg
65 70 75 80
Pro Ser Ser His Glu Asn Leu Ser Leu Leu Pro Pro Gly Ala Ile Ala

95

His	Arg	Gly	Ser	Leu	Ala	Pro	Gly	Val	Leu	Trp	Thr	Ser	Gly	Thr	Ala	
				165					170					175		
Ser	Gly	Ser	Lys	Ala	Ala	Pro	Pro	Pro	Gln	Glu	Gly	Leu	Met	Thr	Glu	
			180					185					190			
Leu	Glu	Ser	Cys	Gly	Gly	Arg	Thr	Ala	Thr	Gly	Pro	Cys	Leu	Pro	Thr	
		195					200					205				
Gly	Ser	Glu	Arg	Pro	Ser	Leu	Arg	Leu	Pro	Gly	Pro	Cys	Pro	Ser	Val	
	210					215					220					
Gly	His	Ser	Gln	Ala	Leu	Gly	Gln	Arg	Lys	Gln	Phe	Arg	Glu	Thr	Ala	
225					230					235					240	
Gln	Ala	Arg	Lys	Ala	Gln	Val	Ala	Trp	Glu	Pro	Arg	Ser	Ala	Glu	Ile	
			245						250					255		
Glu	Leu	Glu	Lys	Gln	Glu	Ala	Trp	Pro	Gly	Pro	Pro	Ala	Ser	Lys	Gly	
			260					265					270			
Glu	Arg	Gln	Ala	Pro	Gly	Val	Gly	Ser	Gly	Val	Leu	Gly	Pro	His	Gln	
	275						280					285				
Thr	Gly	Ile	Phe	Pro	Pro	Leu	Pro	Gly	Gly	Gly	Ala	Gly	Arg	Ala	Ser	
	290					295					300					
Pro	Ala	Glu	Ala	Pro	Gly	Ser	Val	Arg	Asn	Asn	Arg	Lys	Gly	Ser	Arg	
305					310					315					320	
Gly	Thr	Gly	Thr	Ser	His	Thr	Pro	His	Pro	Val	His	Pro	Ile	Gly	Pro	
				325					330					335		
Ile	His	Pro	Val	His	Pro	Val	Tyr	Pro	Ile	Tyr	Arg	His	Phe	Pro	Leu	
		340						345					350			
His	Ser	Gln	Leu	Ser	Arg	Leu	Leu	Thr	Leu	Glu	Glu	Leu	Asn	Ser	Gly	
		355					360					365				
Leu	Ala	Ser	Cys	Leu	Gln	Cys	Gly	Thr	Leu	Cys	Ser	Ser	Thr	Trp	Glu	
	370					375					380					
Pro	Gln	Gly	Ala	Arg	Ser	Val	Gly	Ile	Cys	Thr	Leu	Pro	Leu	Thr	Glu	
385					390					395					400	
Ile	Tyr	His	Ala	Glu	Thr	Ser	Asp	Leu	Arg	Gly	Thr	Ser	Ala	Gly	Pro	
			405						410					415		

Trp Val His

<210> 238

<211> 59

<212> PRT

<213> Homo sapiens

<400> 238

Met Val Ser Asn Asn Tyr Leu Thr Gly Phe Trp Leu Gly Ile Phe Leu
1 5 10 15

Leu Pro His Thr Val Pro Val Glu Asn Val Glu Val His Phe Gly Leu
20 25 30

Tyr Ile Phe Met Lys His Leu Glu Gly Trp Gly Gly Gly Cys Gln Val
35 40 45

Ser Lys Ser Arg Lys Met Tyr Phe Val Arg Leu
50 55

<210> 239

<211> 59

<212> PRT

<213> Homo sapiens

<400> 239

Met Val Ser Asn Asn Tyr Leu Thr Gly Phe Trp Leu Gly Ile Phe Leu
1 5 10 15

Leu Pro His Thr Val Pro Val Glu Asn Val Glu Val His Phe Gly Leu
20 25 30

Tyr Ile Phe Met Lys His Leu Glu Gly Trp Gly Gly Gly Cys Gln Val
35 40 45

Ser Lys Ser Arg Lys Met Tyr Phe Val Arg Leu
50 55

<210> 240

<211> 73

<212> PRT

<213> Homo sapiens

<400> 240

Met Asn Val Leu Pro Leu Lys Lys Asn Gln Leu Ser His Ile Thr His
 1 5 10 15

Ile Tyr Ile Leu Leu His Asn Asn Val Leu Asn Trp Thr Thr Val Asn
 20 25 30

Gln Arg Val Ile Ala Ala Ser Glu Gly Asp Arg Leu Leu Thr Phe Arg
 35 40 45

Tyr Cys Leu Met Pro Gly Lys Pro Trp Glu Pro Arg Gln Val Asn Leu
 50 55 60

Thr Lys Leu Leu Leu Phe Ser Gln Leu
 65 70

<210> 241

<211> 73

<212> PRT

<213> Homo sapiens

<400> 241

Met Asn Val Leu Pro Leu Lys Lys Asn Gln Leu Ser His Ile Thr His
 1 5 10 15

Ile Tyr Ile Leu Leu His Asn Asn Val Leu Asn Trp Thr Thr Val Asn
 20 25 30

Gln Arg Val Ile Ala Ala Ser Glu Gly Asp Arg Leu Leu Thr Phe Arg
 35 40 45

Tyr Cys Leu Met Pro Gly Lys Pro Trp Glu Pro Arg Gln Val Asn Leu
 50 55 60

Thr Lys Leu Leu Leu Phe Ser Gln Leu
 65 70

<210> 242

<211> 39

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (2)

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<222> (11)

<220>
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<222> (15)

<220>
<221> UNSURE
<222> (17) .. (22)

<400> 242

Met Xaa Thr Xaa Xaa Pro Xaa Ser Trp Met Xaa Ala Phe Lys Xaa Asp
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Arg Trp Asn Leu Ser Ile Arg Gly Ser Phe
20 25 30

Ala Thr Asp Phe Ser Asn Gly
35

<210> 243
<211> 81
<212> PRT
<213> Homo sapiens

<400> 243

Met Ile Ile Tyr Asn Tyr Asn Val Tyr Cys Phe Thr Tyr Ile Phe Pro
1 5 10 15

Lys Tyr Thr Ile Asn Ala Leu Pro His Phe Ala Leu Phe Thr Lys Tyr
20 25 30

Ile Leu Glu Ile Ile Leu Tyr Ser Tyr Ile Lys Ser Phe Ile Val Pro
35 40 45

Phe Tyr Gly Cys Lys Met Phe Gln Leu Met Asp Gly Leu Ile Leu Tyr
50 55 60

Arg Ala Thr Leu Arg Leu Cys Pro Ile Leu Leu Phe Leu Ile Leu Leu
65 70 75 80

Lys

<210> 244
<211> 85
<212> PRT
<213> Homo sapiens

<400> 244
Met Ser Gly Glu Leu Cys Ala Gly Ala Gln Gly Pro Gln Gly Leu Val
1 5 10 15
Glu Gly Met Lys Cys Ala His Ile Lys Arg Lys Val Ala Met Gln Ser
20 25 30
Lys Glu Gly Gln Val Gln Met Cys Ser Val Asn Leu Ile Leu Arg Glu
35 40 45
Gly Arg Gly Phe Gly Leu Gly Gln Asp Pro Lys Glu Gly Ala Glu Asp
50 55 60
Met Glu Leu Glu Ala Val Arg Lys Val Val Phe Xaa Glu Gly Ala Val
65 70 75 80
Leu Thr Arg Pro Leu
85

<210> 245
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (28)..(43)

<400> 245
Met Ser Thr Phe Thr Phe Thr Ala Lys Gln Gly Phe Gln Val Val Phe
1 5 10 15
Ser Ser Leu Asn Ser His Leu Pro Lys Met Gln Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Gly Trp Leu Ser
 35 40 45

Glu Ser Pro Asn Asn Pro Met Lys Tyr Glu Arg Phe Leu Glu Arg Leu
 50 55 60

Leu Val Glu Lys Val Thr
 65 70

<210> 246
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 246
 Met Val Pro Gly Gly Gln Arg Ala Gly Gly Leu Cys Leu Lys Arg Ser
 1 5 10 15

Leu Gln Ile Val Phe Glu Lys Ile Thr Gln Asn Gln Pro Trp Xaa Tyr
 20 25 30

Leu Arg Gln Glu Gly Lys Tyr Phe Lys Arg Leu Cys Glu Phe Val Ser
 35 40 45

Val His Leu Phe Phe Val Glu Tyr Ile Leu Leu Ile
 50 55 60

<210> 247
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 247
 Met Gln Gln Asp Ser Tyr Ser Val Asn Trp Tyr Ser Leu Tyr Arg Gly
 1 5 10 15

Gln Leu Lys Lys His Phe Phe Asp Gln Ala Ile Pro Leu Leu Gly Ile
 20 25 30

His Pro Thr Asp Ile Leu Ser His Ile Leu Lys Asn Arg Pro Gly Thr
 35 40 45

Gly Met Ser Trp Leu Pro Ile Glu Ala Val Cys Arg Tyr Pro Leu Pro
20 25 30

Ala Ser Val Pro Ser Glu His Arg Arg Asp Leu Pro Cys Val Ser Leu
35 40 45

His Pro Trp Leu Gln Gly Ser Ser Cys Cys Leu Leu Trp Ser Trp Trp
50 55 60

Gly	Pro	His	Cys	His	Pro	Trp	Ile	Pro	Ser	Cys	Arg	Gln	Pro	Ala	Val
65					70					75					80

Leu Ser Ala Leu Gly Gly Gly Gly Ala Leu Trp Leu Cys
85 90

<210> 257

$\langle 211 \rangle$ 121

<212> PRT

<213> Homo sapiens

<400> 257

Met Phe Ser Ser Ala Asn Ser Ile Leu Gly Ala Leu Leu Ile Arg Ala
1 5 10 15

Gly Met Ser Trp Leu Pro Ile Glu Ala Val Cys Arg Tyr Pro Leu Pro

Ala Ser Val Pro Ser Glu His Arg Arg Asp Leu Pro Cys Val Ser Leu
35 40 45

His Pro Trp Leu Gln Gly Ser Ser Cys Cys Leu Leu Trp Ser Trp Trp
50 55 60

Gly Pro His Cys His Pro Trp Ile Pro Ser Cys Arg Gln Pro Cys Cys
65 70 75 80

Pro Gln Cys Thr Gly Arg Arg Gly Cys Ala Val Val Val Leu Ser Leu
85 90 95

His Arg Cys Pro Leu Val Gly Leu Glu Trp Gly Phe Leu Ile Pro Pro
100 105 110

Ser Met Trp Ile Glu Phe Arg Gly Leu
115 120

<210> 258

Leu

<210> 261

<211> 32

<212> PRT

<213> Homo sapiens

<400> 261

Met Phe Thr Phe Leu Tyr Leu Val Ile Thr Glu Thr Asn Cys Leu Val
1 5 10 15

Thr Phe Glu Ile Asn Glu Ser Xaa Leu Ser Gln Cys Val Ile Asp Asn
20 25 30

<210> 262

<211> 47

<212> PRT

<213> Homo sapiens

<400> 262

Met Ser Ser Met Glu Glu Ala Phe Gly Ser Glu Met Asn Cys Pro Arg
1 5 10 15

Ser Arg Gly Glu Glu Leu Gly Pro Gly Leu Thr Gly Phe Cys Ser Val
20 25 30

Val Leu Ser Arg Pro Trp Phe Leu Leu Tyr Pro Gly Gly Ala Phe
35 40 45

<210> 263

<211> 69

<212> PRT

<213> Homo sapiens

<400> 263

Met Ala Val Leu Lys Thr Trp His Lys Tyr Met Ser Cys Ala Glu Thr
1 5 10 15

Gly Val Ala Pro Ser Phe Ile His Gly Asp Trp Gln Val Thr Thr Pro
20 25 30

Ala Pro Ala Pro Ser Cys Ile Pro Leu Ile Val Arg Lys Arg Glu Gly
 35 40 45

Pro Ser Cys Leu Cys Pro His Ala Cys Val Thr Ala Ser Leu Phe Thr
 50 55 60

Gln Arg Val Val Phe
 65

<210> 264
 <211> 79
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (4)

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 <222> (42)

<220>
 <221> UNSURE
 <222> (46) .. (47)

<220>
 <221> UNSURE
 <222> (52)

<220>
 <221> UNSURE
 <222> (55)

Met Ser Leu Phe Lys Met Ser Phe Thr Ser Ala Gly Gln Glu Gln Ser
 1 5 10 15
 Tyr Met Ala Tyr Pro Gln Met Pro Pro Phe Val Phe Thr Met Thr Ala
 20 25 30
 Asn Gln Gln Leu Thr Thr Gln Ser Leu Val His Pro Val Thr His Ser
 35 40 45
 Leu Lys Pro His Phe Ile Phe Pro Gly Phe Phe Ile
 50 55 60

<210> 270
 <211> 69
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> UNSURE
 <222> (10)

<400> 270
 Met Cys Glu Lys Phe Tyr Ile Lys Cys Xaa Lys Lys Ile Ser Ala Ser
 1 5 10 15
 Met Arg Leu Pro Arg Asn Leu Gly Ala Phe Ile Lys Ile Thr Pro Asn
 20 25 30
 Lys Arg Asn Tyr Arg Arg Lys Lys Glu Lys Met Lys Thr Arg Thr Phe
 35 40 45
 Glu Leu Lys Asn Thr Val Glu Lys Lys Phe Met Glu Lys Met Gln Lys
 50 55 60
 Phe Lys Ile Lys Ile
 65

<210> 271
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 271
 Met Pro Val Tyr Ser Leu Leu Gln Ile Pro Pro Gly Glu Ala Thr Leu
 1 5 10 15

T0620T"40044T000T

Lys Ile Pro Asp Lys Leu Lys Phe Ile Asn Leu Ile Leu Leu Ser Pro
20 25 30

Val Ser Pro Ile Ile Val Pro Ile Ala Asp Thr Ile Pro Asn Leu His
35 40 45

Ser Cys Ser Ala Arg His Glu Ser Arg Lys Trp Gly Leu Ile Leu Pro
50 55 60

Ala Thr Leu Val Ser Asn Tyr Ser Glu Lys Glu Val Asp Val Leu Ile
65 70 75 80

Asp Gly Lys Ile Glu Met Ile Phe Leu Gly Glu Ile Phe Leu Arg Ser
85 90 95

<210> 272

<211> 48

<212> PRT

<213> Homo sapiens

<400> 272

Met Gly Tyr Ile Leu Lys Leu Phe His Tyr Leu Asn Pro Leu Val Ser
1 5 10 15

Val Val Leu Leu Leu Ser Lys Glu Gln Ser Phe Phe Phe His Thr Asn
20 25 30

Gly Val Gly Gln Asn Ile Lys Ala Ser Val Ile Trp Lys Ser Ser Arg
35 40 45

<210> 273

<211> 38

<212> PRT

<213> Homo sapiens

<400> 273

Met Asn Phe Tyr Arg Pro Arg Asn Ser Ser His Tyr Leu Thr Asn Phe
1 5 10 15

Ser Val Cys Val Glu Thr Val Thr Ser Leu Tyr Ser Glu Gly Ile Ala

20

25

30

Thr Tyr Asn Val Thr Asn
35

<210> 274

<211> 42

<212> PRT

<213> Homo sapiens

<400> 274

Met Ala Ala Ile Ser Arg Pro Val Lys Ile His Leu Pro Lys Glu Asn
1 5 10 15

His Ser Phe Phe Phe Phe Phe Trp Arg Trp Ser Phe Ala Leu Val Ala
20 25 30

Gln Ala Gly Val Pro Arg Pro Arg Pro Arg
35 40

<210> 275

<211> 30

<212> PRT

<213> Homo sapiens

<400> 275

Met Leu Phe Trp Thr Leu Gly Ser Val Ile Tyr Tyr Val Cys Pro Ser
1 5 10 15

Ile Glu Val Ser Leu Thr Leu Ser Lys Ile Pro Phe Thr Asn
20 25 30

<210> 276

<211> 244

<212> PRT

<213> Homo sapiens

<400> 276

Leu Leu Gly Thr Ala Phe Gln Leu Phe Gly Tyr Glu Glu Asn Ala Val
1 5 10 15

Gln Ser Leu Gln His Leu Leu Lys Phe Met Ala Ser Asn Lys Ala Ala
20 25 30

Ala Asp Asp Ala Ser Val Ala Ala Ala Ala Gln Ser Phe Phe Gln Arg

45

Ser Leu Lys Ser

<400> 277

Met Met Gly Leu Leu Glu Ala Trp Ile Pro Gln Asp Ser Thr Ala Glu
1 5 10 15

Trp Ser Asn Thr Gly Ser Thr Ala Asn Gln Arg Gln Cys Tyr Ile Leu
20 25 30

Arg Glu Ile
35